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ABSTRACT

This agricultural occupations handbook was developed from the Dictionary of Occupational Titles (DOT) and the U.S. Departments of Health, Education, and Welfare, and Labor publication, Vocational Education and Occupations. It includes the U.S. Office of Education coding for the instructional area of agriculture and the cluster coding for the clusters of occupations within agriculture. It also includes the DOT number for each agricultural occupation in each cluster and a description of that occupation. Instructional areas include agricultural production, agricultural supplies/services, agricultural mechanics, agricultural products (processing, inspection and marketing), ornamental horticulture (production, processing, marketing, and services), agricultural resources (conservation, utilization, and services), forestry (production, processing, management, marketing, and services), and agriculture, other (i.e., agricultural areas not listed or classifiable in one of the preceding areas). (A related document is Agricultural Careers: A Curriculum Guide, CE 017 473.) (JH)

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AGRICULTURAL OCCUPATIONS HANDBOOK

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE

This Agricultural Occupations Handbook was developed from the Dictionary of Occupational Titles and the U.S. Departments of H.E.W. and Labor Publication, Vocational Education and Occupations. It includes the USOE coding for the instructional area of agriculture and the cluster coding for the clusters of occupations within agriculture. It also includes the Dictionary of Occupational Titles number for each agricultural occupation in each cluster and a description of that occupation.

This Handbook should prove useful to students seeking information about specific agricultural occupations as well as those trying to find out how wide a range of occupations are included in the broad field of agriculture.

This Handbook was developed by Floyd J. Lark and Billie Henderson, Graduate Research Associates under the direction of James P. Key and Robert R. Price, Professors, Agricultural Education Department, Oklahoma State University, Stillwater, Oklahoma.

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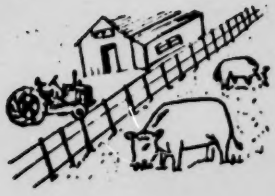

INSTRUCTIONAL PROGRAM

O.E.
01.01 Agricultural Production

Subject matter and learning activities which are concerned with the principles and processes involved in the planning related to and the economic use of facilities, land, water, machinery, chemicals, finance, and labor in the production of plant and animal products. Activities include classroom instruction and laboratory experiences in and out of school, including farms, ranches, and other agriculturally related establishments.

DOT 180.118-010 Field Man (any ind.)

Contracts with farmers to raise or purchase crops, such as fruits, vegetables, and hemp, performing any combination of the following duties: Contacts grower and explains features of contract, such as responsibilities of both parties, condition of product on delivery, and rate of pay. Closes contract and reports to management. Determines production possibilities of land by studying data, such as history of crop rotation, type and fertility of soil, location, topography, and irrigation facilities. Negotiates amount of acreage to be planted or purchased, and selects fields to be planted. Advises grower on preparing land, planting, cultivating, thinning, harvesting, and related problems. Supplies seed and fertilizer. May estimate crop yield. Arranges for financing crops, advance funds to purchase supplies and equipment or services of contractor. Arranges for transportation of crops to processing or manufacturing plants. May arrange for loan of company-owned machinery. May assist in recruiting extra labor during peak seasons. May conduct lectures for farm groups on specific phases of agricultural activities. Inspects growing crops for evidence of disease and insect damage and recommends corrective measures. May prepare articles for publication and for scientific groups. May specialize in one product and be designated as Buyer, Citrus Fruit (can. & preserv.); Field Man, Sugar Beet (sugar).

DOT 180.168-026 Group Leader (agric.)

Crew boss; crew leader; row boss.

Coordinates activities of group of Farm Hands, General I

engaged in planting, cultivating, and harvesting diversified crops: Recruits members for group. Locates jobs for group and accompanies group on job. May be required to hold State registration certificate. Performs other duties as described under Foreman (any ind.).

DOT 180.168-034 Migrant Leader (agric.)

Crew leader; farm-crew leader; migratory-crew foreman.

Contracts seasonal farm employment of Migrant Workers: Consults employment agencies to locate work and confers with Farmers to obtain suitable contracts for crew. Recruits and organizes crew and furnishes transportation to worksite. Schedules en-route rest stops that afford shelters, benches or beds, cooking facilities, fuel and water, and adequate toilet and sanitary provisions. Confers with employer and community officials at site of employment to insure availability of living quarters for families and single individuals, educational and recreational facilities, medical care, and day care for children. Supplies farm implements and machinery to crew and directs them in methods of cultivation, harvesting, and packaging of crop. Prepares payroll and production records. May provide initial financing of trips and advance funds to workers during idle periods. May be required to hold State registration certificate. Performs other duties as described under Foreman (any ind.).

DOT 421.181-010 Farmer, General (agric.)

Raises various kinds of crops and livestock: Determines kinds and amounts of crops to be grown and livestock to be bred, according

to market conditions, weather, and size and location of farm. Selects and purchases seed, fertilizer, farm machinery, livestock and feed, and assumes responsibility for sale of crop and livestock products. Hires and supervises Farm Hands II engaged in planting, cultivating, and harvesting crops, such as corn, peas, potatoes, strawberries, apples, peanuts, and tobacco, and to raise livestock, such as cattle, sheep, swine, horses, and poultry. Performs various duties of Farm Hands, depending on size and nature of farm, including setting up and operating farm machinery.

DOT 421.883-010 Farm Hand, General (agric.)

Farm hand, regular; farm-wage hand; hand; hired hand; hired man; wage hand.

Works on farm devoted to diversified agriculture, performing duties requiring knowledge of livestock and crops and maintenance of structures and equipment: Prepares soil for planting by plowing, harrowing, and fertilizing; seeds, cultivates, sprays, and harvests crops, using a variety of horse-and tractor-drawn machinery [Farm-Equipment Operator (DOT 409.883)]. May irrigate crops [Irrigator II (DOT 422.887)]. Tends livestock and poultry, observing general condition and administering simple medications to animals and fowls. Hauls feed to livestock during grass shortage and winter months. Operates, repairs, and maintains farm implements and mechanical equipment, such as tractors, gang plows, ensilage cutters, hay balers, cottonpickers, and milking machines. Repairs farm buildings, fences, and other structures. May haul livestock and produce to market [Truck Driver, Heavy (any ind.)

(DOT 905.883); Truck Driver, Light (any ind.) (DOT 906.883)]. Usually works year-round and may supervise casual and seasonal help during planting and harvesting.

DOT 421.884-010 Caretaker, Farm (agric.)

Caretaker.

Repairs farm buildings, fences, roads, and equipment on farm of absentee owner, using handtools. Patrols farm area to detect and prevent trespassing, fires, and damage to property.

DOT 429.131-010 Farm Foreman (agric.)

Supervises and coordinates activities of workers engaged in planting, cultivating, and harvesting crops and attending to livestock: Confers with farmowner or manager to evaluate weather and soil conditions, and to develop new plans and procedures. Directs workers in preparing soil, planting, cultivating, spraying, and harvesting crops. Supervises workers engaged in maintenance and repair of farm machinery and equipment. When supervising workers engaged in harvesting, may be designated as Crop Boss. When supervising workers in field, may be designated as Field Supervisor.

O.E.
01.0101 Animal Science

Planned learning experiences which are concerned with the study and operations dealing with theories, principles, and practices involved in producing (breeding, feeding, care, and housing) animals and animal products for economic and other uses.

DOT 153.288-026 Horse Trainer (amuse. & rec.)

Race-horse trainer.

Trains horses for racing, following plans adapted to pecularities of each horse: Familiarizes horses with racetrack starting devices, harness, bridles, saddles, and other riding equipment. Conditions horses for competitive racing by exercise and workouts to bring them to their best physical condition. Gives directions to Stablemen (any ind. DOT 356.874); Exerciser, Horse (DOT 153.874), and other workers engaged in grooming, feeding, and general care of horses.

DOT 411.181-010 Farmer, Dairy (agric.)

Dairyman.

Raises dairy cows to produce milk and milk products: Plans and follows breeding, milking, crop rotation, and marketing schedules to maintain profitable operation. Breeds cows to selected bulls or by artificial insemination. Milks cows by hand or by use of milking machine. Places milk cans in water tanks to cool or pumps milk to refrigerated storage tanks for transfer to tank trucks. Formulates and prepares feeding mixtures. Feeds cattle by hand or by use of mechanical feeder conveyors. Treats sick animals or obtains services of Veterinarian (medical ser. DOT 073.108). Operates farm machinery to plant, cultivate, and harvest crops used as feed for cattle. Keeps detailed cost, milk production, breeding, and marketing records. Cleans barns and stalls and sterilizes milking machines and equipment by hand or by machine to comply with State health regulations. Repairs farm building and machinery.

DOT 411.181-014 Herdsman, Dairy (agric.)

Maintains dairy herd for Farmer, Dairy: Observes cows to determine breeding period. Breeds cows with selected bulls or by means of artificial insemination. Maintains and evaluates milk production and breeding records to select and sell unproductive cows and bulls for meat. Computes feed formulas and mixes feed to obtain maximum milk yield. Feeds cattle by hand or machine. Washes cows, and sterilizes barns, stalls, and milking equipment. Milks cows by use of milking machine and pipes milk to refrigerated cooler. Provides veterinary care, including normal calving of cows, or secures services of Veterinarian (medical ser.). Selects grazing pastures used by herd or operates forage harvester to cut forage and conveys forage to feeders. May grow field crops and maintain mechanical equipment and farm buildings. May supervise Farm Hand, Dairy I and Farm Hand, Dairy II.

DOT 411.884-010 Farm Hand, Dairy (agric.) I

Dairy-field hand; dairy hand; dairy helper; hired hand, dairy.

Works on dairy farm, performing duties requiring knowledge of dairy cattle: Weighs and mixes specified feeds and feed supplements, fills feed troughs with grain and roughage, and fills water troughs. Drives cows from stalls into pasture for grazing. Examines cows to detect diseases, such as mastitis (inflammation of mammary glands), conjunctivitis (pinkeye), and foot rot, and injuries, such as cuts and bruises. Vaccinates animals for diseases, using hypodermic needle or administers vaccines in pill form. Applies medications to cuts or bruises, and sprays cows with insecticide repellents, or drives cows down ramps and into

bath of insecticide. Cleans stalls and barns, using disinfectant solutions, brushes, and shovels, and replaces bedding in stalls. Marks identification symbols or notches on cows, using hand clippers. Washes udders of cows prior to milking and milks cows by hand or by machine. May maintain farm buildings and equipment, plant, cultivate, and harvest feed for stock, and maintain breeding, feeding, and cost records.

DOT 411.884-014 Farm Hand, Dairy (agric.) II

Choreman; hired hand, dairy.

Performs the following duties on a dairy farm: Feeds, waters, and washes cows. Cleans barns and replaces bedding, either manually or with automatic conveyor equipment. Cleans and sterilizes milk containers and equipment or operates pumps to automatically clean milk pipelines. Milk cows by machine [Milking Machine Operator (DOT 411.885)] or by hand, and tends machine to separate milk from cream. Sprays cattle and barns with chemicals to kill insects and whitewashes barn walls. Drives herd to and from pasture, or operates forage harvester to cut grass and conveys forage to feeder bunks. Plants, weeds, hoes, and thins crops and performs other manual tasks to produce, harvest, and store grain, hay, and other crops. May drive tractors and operate other farm equipment, such as plows, cultivators, mowers, and combines. May adjust and repair equipment. May raise other livestock and poultry. May be employed on temporary or part-time basis. When performing duties inside barn, may be designated Barnman. May be designated according to work performed as Cattle Herder; Cow Washer; Cream-Separator Tender; Milker, Hand.

DOT 411.885-010 Milking-Machine Operator (agric.)

Milker, machine.

Tends machine that milks dairy cows: Guides cow into stanchion and cleans teats and udder of cow with disinfectant: Squeezes cow's teat to collect sample of milk in strainer cup and examines sample for curd and blood. Starts milking machine and attaches cups of machine to teats of cow. Removes cups when required amount of milk is obtained from cow. Dips cups of machine into disinfectant solution after each cow is milked. Empties milk receptacles and cleans and sterilizes equipment.

DOT 412.181-014 Poultry Breeder (agric.)

Chick culturist.

Raises purebred chickens or other fowls: Purchases stock fowl according to egg production, size, prizes won, or other reasons. Selects and pairs birds for breeding or breeds them by artificial insemination. Arranges with buyers for sale of pedigreed eggs and pedigreed day-old chicks.

DOT 412. 181-018 Poultryman, Egg (agric.)

Chicken farmer, egg; poultry farmer, egg; poultryman.

Raises flocks of hens for egg production: Selects and purchases laying stock. Feeds hens, cleans cages and nests, sprays hen houses with disinfectants, and observes hens for indications of diseases, such as fowl pox, bronchitis, and coccidiosis. Places vaccines in drinking water, injects vaccines into hens, or dusts air with vaccine powder to vaccinate hens against diseases. Collects eggs from cages or nests and records number of eggs layed. Packs eggs in cases or cartons for shipment and stores eggs in

coolers. Inspects eggs to ascertain quality of eggs for consumption. Arranges with wholesalers for sale of eggs. May hire workers to attend to hens. May incubate fertile eggs.

DOT 412.181-022 Poultryman, Meat (agric.)

Chicken farmer; chicken farmer, meat; farmer, poultry; poultry farmer, meat; poultryman; poultry raiser.

Raises chickens, turkeys, and other poultry for sale as meat: Selects and purchases poultry stock. Feeds poultry, cleans brooders and houses, sprays poultry houses with disinfectants, and observes poultry for indications of diseases, such as fowl pox, bronchitis, and coccidiosis. Places vaccines in drinking water, injects vaccines into poultry against diseases. Maintains feed and production records. Hires and supervises workers to attend to poultry stock. Arranges with wholesaler for sale of dress poultry, and pack poultry for shipment. May specialize in raising turkeys and be designated as Turkey Raiser.

DOT 412.884-014 Farm Hand, Poultry (agric.)

Attends to poultry stock on farm concerned with hatching or selling eggs and raising poultry: Places eggs in incubator trays, labels trays, and places trays in incubator. Removes chicks from incubator trays and grades them [Chick Grader], and cleans incubator. Cuts off tips of poultry beaks [Poultry Debeaker]. Ascertains sex of poultry [Chicken Sexer]. Places chicks in heated brooder houses until they reach specified size and age. Cleans and fills feeders and water containers. Cleans brooders and houses, using brooms and shovels. Sprays poultry houses with disinfectants

and vaccines to prevent diseases, such as bronchitis. Observes poultry for indication of diseases, such as fowl pox, bronchitis, and coccidiosis, and removes weak, ill, or dead poultry from flock. Collects eggs from trap nests, releases hens from nest, and records number of eggs laid by each hen. Packs eggs in cases or cartons for shipment. Selects, kills, and dresses poultry, and packs poultry in containers for shipment. Maintains feed and breeding records. May care for flock of turkeys on range and be designated as Turkey Herder. May be designated according to specific duties performed as Brooder Man; Poultry Feeder; Poultry Packer; Trap Nester. See also Laborer, Hatchery (agric.).

DOT 412.887-014 Laborer, Hatchery (agric.)

Incubator man; Watchman, hatchery.

Attends to eggs and baby chicks in hatchery: Places eggs in incubator trays, wads paper between eggs to secure them, and clips trays to incubator racks. Transfers trays from incubator to hatchery and removes paper wads from between eggs to make room for hatching chicks. Transfers hatched chicks from trays to chick boxes and counts out prescribed number of chicks to each box section. Supplies baby chicks to other workers for sexing, grading, and debeaking. May be known according to task performed as Chicken-Sexer Helper; Chick-Grader Helper; Egg Trayer.

DOT 413.131-010 Stock-Ranch Foreman (agric.)

Supervises and coordinates activities of workers engaged in breeding, feeding, herding, marking, and segregating livestock and in construction and repair of fences, pens, and buildings:

Inspects stock, buildings, fences, fields, pasturage and feed supply, notes tasks to be done, and assigns them to crews or individual workers. Performs other duties as described under Foreman (any ind.). May be designated according to type of stock raised as Cattle-Ranch Foreman; Sheep-Rancher Foreman.

DOT 413.138-010 Camp Tender (agric.)

Supervises workers engaged in tending bands of sheep on range or pasture and keeps them supplied with food and other necessities: Designates area to be used by each Sheep Herder. Transports food, drinking water, fuel, mail, animal feed, and other supplies to Sheep Herder. Observes condition of range, water, and animals, and gives directions to Sheep Herder when to move to another range, reporting findings to owner of band or to foreman. Assists in moving camp to another location by hauling supply wagon, using horse or truck. May substitute for Sheep Herder during emergencies, vacations, or for other reasons.

DOT 413.181-010 Cattle Rancher (agric.)

Beef grower; cattle feeder; cattle grower; cattleman; cattle ranchman; stockman.

Breeds and raises cattle: Lays out and fences pens and pastures, according to numbers, ages, and types of cattle to be held and feed available. Supplies cattle with hay and other forage during winter or when pasturage is low, and provides salt licks (blocks of minerals and salt) as feed supplement. Selects and breeds purebred animals for show and improvement of herd, and maintains feed weight and pedigree records of progeny. Determines

favorable months for calving, and arranges for artificial insemination of cows or releases bulls among cows. Brands, castrates, dehorns, slits ears, bobs tails, or tatoos calves to improve or mark them according to customs, laws, and practices of local area. Injects calves with serums, antibiotics, and antitoxins, using hypodermic syringe to vaccinate them against disease and infection. Hires and supervises workers to attend to cattle. Arranges with buyers for sale of cattle. May be designated according to speciality as Cattle Breeder; Cattle Farmer, Meat Production.

DOT 413.181-014 Goat Keeper (agric.)

Goat herder.

Breeds and raises goats for their milk or hair. Milks goats and sells milk to hospitals and other buyers. Clips hair and markets it for manufacture of mohair.

DOT 413.181-018 Herdsman, Swine (agric.)

Breeds and raises swine for sale as meat or to other breeders: Selects and mates boars and sows according to breed of litter desired. Clips navel cord of newborn pigs, and removes needle teeth, using hand clippers. Maintains records of breeding and farrowing dates, number and sex of pigs farrowed, and birth weights. Determines quantity and types of grain to be fed to swine, according to age and weight of swine, and provides special feeds to sows in gestation. Weighs and mixes feeds, such as grain, alfalfa meal, and silage, and fills feed and water troughs. Weighs and mixes additives with feed. Maintains record of feedings, and records weights of swine at specified intervals throughout growing

periods. Removes testes of boars, using scalpel. Vaccinates swine for cholera, using syringe and hypodermic needle. Examines swine to detect injuries, and applies medication. Washes swine with disinfectant solutions and sprays or dusts them with insecticide repellents. Regulates temperature in pig houses. Clamps metal rings in nostrils of swine to prevent rooting, using hog ringers. Marks identifying symbols or notches on swine, using hand clippers or branding irons. Sells breeding stock at auction and negotiates with buyers for sale of swine for meat. May groom and trim swine and exhibit swine at livestock shows. May act as judge of swine at shows and fairs. May butcher swine and cure meat. May grow corn and other grain for swine.

DOT 413.181-022 Horse Breeder (agric.)

Horse raiser.

Manages farm to breed and raise saddle horses, matched teams of draft animals, or race horses, usually specializing in one type: Selects stallion and mare for breeding, using knowledge of horse's ancestry, color, and other characteristics. Feeds, waters, and grooms horses. Maintains feed and production records. Exhibits stock at horse shows and fairs. Breaks and trains horses [Horse Breaker, Draft; Horse Breaker, Saddle; Horse Trainer I (amuse. & rec.); Horse Trainer II (amuse. & rec.)]. Sells horses. May raise horses for display at horse shows and be designated as Horseman, Show.

DOT 413.181-026 Sheep Rancher (agric.)

Sheep farmer.

Breeds and raises sheep for production of wool, meat, and

breeding stock: Provides pasture, range, and crop land to graze and produce feed for livestock. Selects and purchases livestock, equipment, and supplies. Determines time for sheep to be placed on range for grazing, time for breeding, and type and amount of supplemental feeding required to produce maximum wool and meat. Provides water for animals. Arranges for and directs workers engaged in lambing, docking (cutting off tails), shearing, dipping (disinfecting animals), selecting animals for market or breeding, and other phases of sheep raising. Insures adherence to State health and grazing regulations for animals. Hires and discharges workers. Markets animals and wool. Maintains breeding, production, cost, and other records. May groom and exhibit show animals.

DOT 413.884-018 Farm Hand, Livestock (agric.)

Attends to livestock, such as cattle, sheep, and hogs, on farm: Mixes feed and additives, fills feed troughs with grain and roughage, and fills water troughs. Drives livestock from stalls to pasture for grazing. Examines animals to detect diseases, such as foul foot, foot and mouth disease, and pinkeye, and injuries, such as cuts and bruises. Vaccinates animals for diseases by placing vaccines in drinking water or feed, or using syringes and hypodermic needles. Applies medication to cuts and bruises and sprays livestock with insecticide repellents or drives livestock down ramps and into bath of insecticide. Confines livestock in stalls and washes and clips them to prepare them for birthing. Assists Veterinarian (medical ser.) in delivery of new born livestock. Binds or clamps testes of male stock or removes testes by surgery to castrate male animals. Marks identification notches

or symbols on livestock, using hand clippers or branding irons. Clamps metal rings into nostrils of cattle and hogs to permit easier handling and to prevent rooting. Docks lambs' tails using hand snips. Cleans livestock stalls and sheds, using disinfectant solutions, brushes, and shovels. Grooms, clips, and trims animals for exhibition. May maintain farm buildings and equipment, plant, cultivate, and harvest feed grain for stock, maintain breeding, feeding, and cost records, and shear sheep. May specialize in attending to specific kind of livestock and be designated Farm Hand, Cattle. When attending to herd of horses, may be designated Caviya. When attending to sheep, may be designated as Shepherd or Wrangler.

DOT 413.884-030 Ranch Hand (agric.)

Works on ranch, performing duties requiring knowledge of cattle and other livestock, such as horses, sheep, and goats: Attends to cattle [Cowpuncher] and sheep [Sheep Herder] on open or enclosed range. Moves stock from one pasture to another according to grass supply. Irrigates hay and grain fields [Irrigator II]. Operates farm machinery [Farm-Equipment Operator] to rake and bale hay. Repairs fences and equipment, such as water pumps and tanks.

DOT 419.131-010 Barn Boss (any ind.)

Corral man; hostler, lot man; stable manager.

Supervises and coordinates activities of workers engaged in maintenance of stables and care of draft animals or race horses: Establishes amount and type of rations to feed animals according

to past food consumption, health, activity, and size of animals. Inspects animals for evidence of disease or injury and treats animals according to experience or following instructions of Veterinarian (medical ser.). Inspects stables and animals for cleanliness. Supervises Stableman in upkeep of stalls, feed and water troughs, and equipment, and in care and feeding of animals.

DOT 419.181-010 Animal Breeder (agric.)

Culturist.

Breeds and raises mice, rats, guinea pigs, monkeys, and other animals for use in experimental and biological research: Keeps record of genealogy, weight, diet, and other data for breeding purposes. Breeds and crossbreeds animals, selectively, to produce offspring with particular genes, traits, color, and size. Feeds and waters animals and cleans their pens and yards. Examines animals to detect signs of illness. Builds and repairs hutches, pens, and fenced yards. Adjusts temperature in building where animals are kept to approximate temperature of animals' habitat. Arranges with hospitals and research centers for sale of animals. May be designated according to particular kind of animal bred and raised as Guinea Pig Breeder; Mouse Breeder; Rat Breeder.

DOT 419.181-014 Beekeeper (agric.)

Apiarist; bee farmer; beeman; bee raiser; bee rancher; honey producer.

Cultivates bee for production of honey and pollination of crops: Assembles beehives, using hand tools. Arranges with sellers for purchases of honeybee colonies. Inserts honeycomb of

bees into beehive or inducts wild swarming bees into hive of prepared honeycomb frames. Places screen plug in hive entrance to confine bees and sets hive in orchard, clover field, or near other source of nectar and pollen. Forces bees from hive, using smoke pot or by placing carbolic acid soaked pad over hive, to inspect hive and to harvest honeycombs. Scrapes out parasites, such as wax moth larvae, and removes vermin, such as birds and mice. Collects royal jelly from queen bee cells for sale as base for cosmetics and as health food. Destroys superfluous queen bee cells to prevent division of colony by swarming. Destroys diseased bee colonies, using cyanide gas. Burns hive of diseased bee colony or sterilizes hive, using caustic soda solution. Uncaps harvested honeycombs and extracts honey [Honeycomb Decapper (food prep., n.e.c.); Honey Extractor (food prep., n.e.c.)]. Arranges with buyers for sale of honey. May cultivate bees to produce bee colonies and queen bees for sale and be designated as Bee Producer; Queen Producer.

O.E.
01.0102 Plant Science

Planned learning experiences which are concerned with the study and operations dealing with principles and practices involved in the culture and production of agricultural plants.

DOT 180.168-030 Manager, Production, Seed Corn (agric.)
Manager regional.

Plans and directs development and production of hybrid seed corn for commercial seed companies: Plans and executes experimental field studies to develop and improve varieties of hybrid corn with

desired characteristics, such as greater yield, resistance to disease and insects, and adaptability to specific soils and climate. Selects and inbreeds plants until specific inbred line is produced, using various breeding techniques, such as crossbreeding, backcrossing, and outcrossing. Confers with farmers to arrange contracts for raising hybrid corn. Distributes seeds, specifies areas of farm to be planted, directs workers engaged in corn planting to make most effective use of land, and oversees fertilizing, cultivating, detasseling, and harvesting [Field Supervisor, Field Production; DOT 180.168-018]. Directs through subordinate foremen, workers engaged in shelling and grading corn. Examines equipment used to clean and grade shelled corn for proper functioning and plans changes in drying, grading, storage, and shipment of seed corn for greater efficiency and accuracy. Interprets company policies and hires, discharges, transfers, and promotes workers. Records production, farm management practices, parent stock, or other data.

DOT 180.168-038 Superintendent (agric.; can. & preserv.)

Coordinates packinghouse activities with harvesting of crops for members of cooperative packing association: Inspects farms to ascertain quantity of crops to be processed by packinghouse. Advises growers of best time for harvesting crops, considering such factors as maturity of and demand for products. Informs packinghouse foremen and salesmen of crops to be processed to plan packinghouse activities and sales campaigns. Oversees packinghouse activities and assigns duties to subordinate foremen. Reports needed packinghouse repairs and replacements to superiors. May hire and discharge packinghouse employees.

DOT 180.168-042 Superintendent, Production (agric.)

Grove superintendent; manager, production; production boss; production foreman.

Supervises and coordinates activities of workers engaged in laying out of new citrus groves and maintenance of mature groves, owned by packinghouse or other absentee companies. Analyzes soil to determine type and quantity of plant food required for maximum production. Directs amount and kind of insecticides and fungicides to be used and method of application. Keeps company officials informed of condition of groves, quantity of crops estimated for harvesting, and other factors affecting production of citrus fruits. May contract to maintain groves for independent owners. May purchase supplies for grove care.

DOT 180.168-018 Field Supervisor, Seed Production (agric.)

Coordinates activities of Farmers engaged in producing seed stocks for commercial seed companies: Inspects and analyzes soil and water supplies of farm and studies wind currents, land contours, and windbreaks to plan production areas for effective utilization of land, prevention of cross-pollination, and avoid recurrence of previously planted crops. Distributes seed stock to Farmers and specifies areas and number of acres to be planted. Gives instructions to workers engaged in cultivation procedures, such as fertilization, tilling, and detasseling. Determines harvesting dates and methods of harvesting. Plans and directs storage and shipment of harvested seed crop to insure protection of seed life.

DOT 401.137-010 Detasseling-Crew Supervisor (agric.)

Supervises and coordinates activities of workers engaged in breaking and pulling tassels from corn stalks: Directs crew members in methods of pulling tassels, stems, and suckers from corn stalks. Designates rows of corn to be detasseled so that ears of corn will be pollenized by tassels of contiguous rows of corn. Records detasseling time and acreage covered. May recruit crew members and them to fields.

DOT 401.138-010 Area Foreman (agric.)

Supervises and coordinates activities of workers engaged in detasseling corn on hybrid-seed corn farm: Examines ears of corn in field to determine time of emergence of silk and its retention of accompanying pollen from tassels, and schedules workload. Assigns block and field code numbers and identifies and marks male and female rows of stalks. Examines fields to find areas of rapid growing tassels and orders crew to remove tassels before emergence of silk from ears of corn. Assigns fields to Detasseling-Crew Supervisor. Determines frequency of detasseling according to factors such as temperature, moisture, time of season, and variety of corn grown. Inspects fields for undetasseled stalks, estimates number of stalks in field, and computes percent of tassels pulled by making simple counts of plants. Registers corn detasseling crew and issues identification badges. Performs other duties as described under Foreman (any ind.).

DOT 401.181-010 Farmer, Cash Grain (agric.)

Cash grain grower; grain farmer.

Plants, cultivates, and harvests one or more grain crops,

such as barley, corn, rice, soybeans, or wheat, for cash sale: Selects and buys type and amount of grain to be grown, taking into consideration local growing conditions and market demands. Operates equipment to plow, disk, harrow, and fertilize ground for planting, and to plant grain. Plans harvesting, considering ripeness and maturity of grain and weather conditions and operates grain-harvesting equipment. Sells grain or stores grain for future sale. Directs activities of workers. Hires and discharges workers. May be designated according to specific grain grown as Corn Grower; Rice Farmer; Wheat Grower.

DOT 401.884-010 Farm Hand, Grain (agric.) I

Performs following duties concerned with planting, cultivating, harvesting, and storing grain crops, such as wheat, oats, rye, and corn: Operates farm machinery to plow, harrow, and cultivate soil for seeding, and to plant, cultivate, and harvest grain [Farm-Equipment Operator] (DOT 409.883). Performs variety of other duties, such as husking and shelling corn, lubricating and repairing farm machinery, and unloading grain onto conveyors to storage bins or elevators. May plan and schedule plowing, cultivating, and harvesting operations.

DOT 402.181-010 Cotton Grower (agric.)

Cotton farmer; cotton planter; cotton raiser.

Raises cotton: Determines variety and amount of cotton to be grown, according to market conditions, weather, and size and location of farm. Selects and purchases seed, fertilizer, irrigation equipment, and farm machinery and arranges with buyers for sale

of crop. Hires and directs Farm Hands engaged in planting, cultivating, and harvesting crop. Performs various duties of Farm Hands, depending on size and nature of farm, including setting up and operating farm machinery.

DOT 402.883-010 Farm Hand, Cotton (agric.) I

Performs the following duties to plant, cultivate, and harvest cotton crop: Drives farm machinery to prepare soil and plant and fertilize crop [Farm-Equipment Operator]. Thins and weeds crop, using hand implements. Operates cotton-picking machine to harvest cotton [Farm-Equipment Operator]. May supervise workers engaged in weeding, thinning, and harvesting cotton. May weigh picked cotton and record weights. May irrigate fields [Irrigator II] (DOT 422.887). May load chemicals on airplane and mark field for Airplane Pilot (DOT 196.283).

DOT 403.137-010 Row Boss, Thinning (agric.)

Supervises and coordinates activities of workers engaged in thinning seedlings of crops, such as cauliflowers, lettuce, and watermelons: Assigns rows and distributes hoes to workers. Observes thinning process, notes evidence of poor thinning, and directs workers to remove more or less plants and to correct spacing. Keeps time and production records. Collects tools at end of work day. Performs other duties as described under Foreman (any ind.).

DOT 403.181-010 Vegetable Grower (agric.)

Garden farmer; market gardener.

Raises vegetables: Determines kind and amount of crop to be

grown, according to market conditions, weather, and size and location of farm. Selects and purchases seed, fertilizer, and farm machinery and arranges with buyers for sale of crop. Hires and directs farm workers engaged in planting, cultivating, and harvesting crop, such as beets, beans, onions, peas, and potatoes. Performs various duties of farm workers, depending on size and nature of farm, including setting up and operating farm machinery [Farm Hand]. (DOT 403.883-010). May grow vegetables in greenhouse to produce out-of-season crops. May grow a variety of vegetables and be designated Truck Farmer or specialize in a single vegetable and be designated Beet Raiser; Onion Farmer; Potato Farmer; Sugar-Beet Farmer.

DOT 403.883-010 Farm Hand, Vegetable (agric.) I

Performs the following tasks to plant, cultivate, and harvest vegetables, such as peas, lettuce, tomatoes, and lima beans: Drives farm machinery [Farm-Equipment Operator] to prepare soil and plant and fertilize crops. Thins, hoes, and weeds row crops, using hand implements. Irrigates land to provide sufficient moisture for crop growth, using irrigation method appropriate to crop or locality. Drives farm equipment to harvest crops. May mix spray solutions and spray crops. May supervise seasonal workers and keep time records of workers. May use horse-drawn equipment to plant, cultivate, and harvest crops. May adjust and maintain farm machinery. May be designated according to crop specialty as Farm Hand, Sugar Beet; Farm Hand, Sugarcane.

DOT 403.886-010 Seed Cutter (agric.)

Cutter; potato-seed cutter.

Cuts seed potatoes into sections of uniform size for mechanical planting by any of the following methods: (1) Cuts potato into sections containing one or more eyes, using paring knife or by drawing potato along knife attached to table. (2) Dumps potatoes into hopper of machine that cuts potatoes in half. (3) Places potatoes on revolving arms of machine that cuts potatoes into quarters.

DOT 404.131-010 Fruit-Farm Foreman (agric.)

Fruit-ranch foreman; orchard foreman.

Supervises and coordinates activities of workers engaged in cultivating, pruning, spraying, thinning, propping, and harvesting tree fruits, such as apples, lemons, oranges, peaches, and pears. Assigns trees, rows, or blocks of trees to workers. Directs workers in spacing, thinning, spraying, and pruning trees and in harvesting fruit. Issues ladders, pruning tools, and picking bags or buckets to workers. Inspects harvested fruit for bruises, maturity, and improper harvesting defects. May hire and discharge workers. May be designated as Citrus-Fruit Foreman. Performs other duties as described under Foreman (any ind.).

DOT 404.137-010 Grove Foreman (agric.)

Supervises and coordinates activities of workers engaged in maintenance of citrus groves: Assigns workers duties such as soil conditioning, irrigating, pruning, spraying, and fertilizing citrus groves. Takes samples of soil from various locations in grove, using soil auger, shovel, or other device. Examines trees

for blight and insect infestation, and records degree of damage and location of affected trees. Prepares reports of observations. Requisitions supplies, such as insecticides and fertilizer. Performs other duties as described under Foreman (any ind.).

DOT 404.181-010 Berry Grower (agric.)

Fruit gardener.

Raises berries for commercial use: Operates farm machinery to plow, harrow, and disk soil [Farm-Equipment Operator]. Purchases nursery stock, takes cuttings, or digs sprouts or runners from plants in other fields and plants them. Applies fertilizer to soil. Sets poles and strings wires on poles to form trellises. Ties vines or berry canes to trellis wires, and prunes canes or vines to desired shape, length, and number. Arranges with buyers for sale of crops. When growing cranberries, prepares bog by diking around it and installing system of gates to alternately flood and drain bog. May hire workers to cultivate and harvest crop. May be designated according to crop grown as Blueberry Grower; Cranberry Grower; Raspberry Grower; Strawberry Grower.

DOT 404.181-014 Grape Grower (agric.)

Vine grower; vineyard foreman; manager, vineyard.

Cultivates grapes for commercial use: Determines varieties and amounts of grapes to be grown, according to soil, weather, and market conditions. Selects and purchases vine stock, fertilizer, and farm machinery. Hires Farm Hands to prepare soil, lay out new plantings, and train young stock. Operates farm machinery [Farm-Equipment Operator], and directs Farm Hands or signals

Airplane Pilot to apply fertilizer and pesticides to crop. Decides when and how to bud, graft, prune, cultivate, sucker, and harvest crop, based on knowledge of grape culture. Arranges with buyers for sale of crop.

DOT 404.181-018 Orchardist (agric.)

Farmer, fruit.

Grows fruits and nuts: Operates farm machinery to plow, harrow, and disk soil [Farm-Equipment Operator]. Purchases and plants nursery stock grafted to standard varieties of orchard trees, plants seedling rootstocks and buds, or grafts nursery stock with desired varieties. Fertilizes soil. Plants compatable ground crops to shade ground, conserve moisture, and improve soil. Prunes and trains growing trees to develop desired shape and number of leaders (main limbs) [Tree Pruner (DOT 404.884)]. Hires workers to harvest fruit or nut crop, and arranges with buyers for sale of crop. May be designated according to orchard crop grown as Apple Grower; Filbert Grower; Orange Grower; Peach Grower; Pecan Grower.

DOT 404.883-010 Cranberry Picker, Machine (agric.)

Drives or controls gasoline-engine powered picking machine to harvest cranberries: Attaches empty sack to discharge end of machine. Starts machine and pushes or rides it into cranberry bog. Guides pronged scoop or suction hose over ground to harvest cranberries. Loads filled sacks of cranberries onto truck or rail car. May be designated according to type of machine used as Scoop-Machine Picker; Suction-Machine Picker.

DOT 404.883-014 Farm Hand, Citrus Fruit (agric.) I

Works on farm, performing duties requiring knowledge of planting, cultivating, and harvesting of citrus fruits: Operates farm machinery to plow, cultivate, and fertilize soil [Farm-Equipment Operator]. Hoes, weeds, and cuts growth under trees. Mixes ingredients and sprays trees with various chemical solutions to kill insects and prevent disease. Sprays ground in noncultivated citrus grove with oil and chemical solution to prevent growth of weeds. Prunes trees to remove excess or unwanted branches and improve quality, using pruning saw and clippers. Irrigates soil and trees, using portable equipment or controlling flow of water into ditches. Starts fans that circulate air to prevent frost from forming on crop, or places and lights smudge pots or heaters to prevent damage to citrus grove during cold weather. Picks fruit during harvest. Drives truck to transport materials, supplies, and products. May care for livestock and poultry.

DOT 404.883-018 Farm Hand, Fruit (agric.) I

Works on farm, performing duties requiring knowledge of planting, cultivating, spraying, and harvesting noncitrus fruits, such as apples, apricots, peaches, pears, and prunes: Operates farm machinery to plow, cultivate, and fertilize soil [Farm-Equipment Operator]. Sprays trees to control insects, fungus growth, and disease. Sprays trees in spring to loosen and remove surplus fruit, and in fall to prevent early dropping and to prolong coloring. Sets out seedlings and prunes trees. Thins fruit to obtain better quality fruit. Props limbs to prevent them from breaking under weight of fruit. Drives truck to transport materials, supplies, workers, and products.

DOT 404.883-022 Fruit-Harvester Operator (agric.)

Operates self-propelled harvesting machine to pick fruit from trees: Sits in bucket seat suspended at end of boom and starts machine. Drives machine alongside fruit tree and operates controls to move bucket seat up and down and in and out of tree. Pulls or cuts mature fruit and drops fruit into container. May be designated according to kind of fruit harvested as Orange-Harvester Operator.

DOT 404.883-026 Shaking-Machine Operator (agric.)

Drives and controls tractor equipped with hydraulic boom to shake fruit from tree: Drives tractor to fruit tree and attaches grasping device of hydraulic boom to branch of tree. Signals Harvest Hand, Fruit (DOT 404.887) to place canvas under tree to catch fruit and starts shaking mechanism.

DOT 404.887-010 Farm Hand, Berry (agric.)

Transplants, weeds, cultivates, fertilizes, picks, and packs berries, such as strawberries, blackberries, and raspberries, under specific instructions. Prepares seedbed, lays out rows, distributes fertilizer, and applies insecticides with power and hand distributor. May clear and burn brush and trees from land.

DOT 404.887-018 Farm Hand, Fruit (agric.) II

Laborer, fruit farm; laborer, orchard.

Plants, cultivates, and harvests fruits other than citrus fruit: Sets out fruit plants as directed. Sprays plants with prescribed pesticides to control insects and disease. Prunes branches as required, using pruning hooks, shears, and clippers.

Lights smudge pots and torches during cold weather or starts ram-jet wind machine equipped with jet-powered rotor blades that heat and circulate air about crop to reduce chance of frost. Thins fruit by removing immature fruit to prevent breaking of branches due to excess weight and to increase quality of remaining fruit. Props limbs that are heavily laden with mature fruit. Harvests mature fruit [Harvest Hand, Fruit (DOT 404.887)]. May be designated according to duties performed as Fruit Thinner; Smudger.

DOT 405.181-010 Drug Grower (agric.)

Grows various plants used for medicinal or flavoring purposes, such as mint, golden seal, wormwood, ginseng, belladonna, and digitalis, utilizing knowledges of planting, growing, and marketing methods to produce and process crops: Directs workers engaged in growing and marketing produce to maintain profitable operation. Arranges with recruiters to hire migratory crews. Arranges housing facilities for crews. Gives instructions to and directs subordinates engaged in draining and irrigating land, planting and weeding by machine or by hand, harvesting crops, and controlling disease. Estimates needs and buys supplies and equipment. Inspects crops for degree of maturity and schedules harvesting. Schedules planting and growing of crops, such as onions and potatoes, alternating with drug crops to provide crop rotation, maintain land fertility, control plant diseases, diversify production, and extend growing season. Keeps cost, production, and marketing records. Prepares crew payrolls or directs subordinates so engaged. Determines time for selling crops to secure favorable market price. May direct workers engaged in processing crop on farm, including such activities as distilling mint leaves to

recover mint oil. May be designated according to crop specialty as Ginseng Farmer; Peppermint Farmer.

DOT 405.181-014 Hay Farmer (agric.)

Raises crops, such as timothy, clover, and alfalfa, to be used as hay: Determines kind and amount of hay to be grown depending on market conditions and location of farm. Selects and purchases seed, fertilizer, and farm machinery, and hires and directs farm workers engaged in planting, cultivating, and harvesting crop. Performs various duties of farm workers, depending on size of farm, including setting up and operating farm machinery [Farm Hand]. Arranges with buyers for sale of crop.

DOT 405.181-018 Hop Grower (agric.)

Raises hops: Operates farm machinery to plow, harrow, disk, and fertilize soil [Farm-Equipment Operator]. Plants sets (cuttings from underground stems of mature plants) that have been taken from other fields. Directs crews engaged in setting poles and stringing wires across them to make trellises, twining the vineyard by running twine from pegs set in ground to trellis wires overhead, pruning the vines to permit only a limited number of vines to develop at each hill (group of sets), and training vines by twisting them around twines that will lead them to overhead trelliswork. Sprays crop to control insects, fungi, or diseases. Waters crop using one or more methods of irrigation, such as standpipes, siphon hoses, or rill irrigation. Hires and directs workers to cultivate and harvest crop, and arranges with buyers for sale of crop.

DOT 405.181-022 Peanut Farmer (agric.)

Grows peanuts for commercial use: Operates machinery to prepare and fertilize soil, plant shelled peanuts in rows, and cultivate and harvest crop [Farm-Equipment Operator]. Irrigates crop by use of ditching or sprinkler systems. Weeds crop, using hoe, until plants shade ground. Operates equipment, such as peanut digger-shakers and threshers, or directs contract crews to harvest crop. Dries and cures crop in windrows in field or in loose shocks for several weeks. Threshes and bags peanuts for sale or storage.

DOT 405.181-026 Sugarcane Planter (agric.)

Grows sugarcane: Determines amount of crop to be grown and areas to be planted according to soil, weather, and market conditions. Operates farm machinery or hires Farm-Equipment Operator to prepare soil and to plant and cultivate crop. Engages Farm Hands during harvest season to cut cane for extraction of raw sugar. Arranges with buyers for sale of crop.

DOT 405.181-030 Tobacco Grower (agric.)

Tobacco farmer; tobacco planter; tobacco raiser.

Plants, cultivates, harvests, and cures tobacco: Operates farm machinery to break, smooth, and fertilize soil in seedbeds and fields, using tractor- or animal-drawn implements, such as plows, harrows, and cultivators [Farm-Equipment Operator]. Plants seed in bed and covers bed with cloth or glass to protect seedlings from weather. Transplants tobacco plants in rows, using hand or machine transplanter. Breaks tops and suckers from plants to prevent seed development and encourage nutrition of leaves. Cuts

tobacco plant (burley, broadleaf, havana seed), using knife or hatchet, or primed individual leaves (bright leaf, shade). Hangs plants or leaves on suspended sticks in curing sheds or barns. Directs workers engaged in planting, cultivating, and harvesting tobacco. Arranges with buyers for sale of crop. When processing burley tobacco, strips cured leaves from stalk, grades leaves, ties leaves into hands and packs each grade in baskets for marketing. Records operating expenses and profits, such as materials used, labor costs, machinery repairs, equipment purchased, and sale of crops. In some areas, particularly Connecticut valley, covers fields with muslin, supported by wires and posts, to grow cigar-wrapping leaves under artificial shade and humid conditions.

DOT 405.685-010 Peanut-Picker Operator (agric.)

Peanut-picking-machine operator.

Tends machine that separates peanuts from vines and removes foreign matter from peanuts: Starts machine and feeds vines onto conveyor of machine by hand or by use of pitchfork. Attaches bag to discharge spout of machine and shifts lever to dump peanuts into bag. Sews top edges of filled bag together, using needle and thread, or ties bag with string.

DOT 405.887-010 Farm Hand, Hops (agric.)

Laborer, hop farm.

Plants, cultivates, and harvests hops, working as crewmember: Digs sets (cuttings from underground stems of mature plants), using hoe, and plants them in rows. Sets up poles and strings them with twine to form trellis. Hoes weeds from around hopvines and hills-up

earth around base of each vine. Cuts superfluous shoots from vines, using knife, and twists vines around twines leading to overhead trellis. Picks hops and drops them into sacks or cuts hop laden vines, using sickle or machete. Weaves cut vines through vertical bars on truck bed and picks up dropped hopvines and tosses them onto truck. Passes hopvines from truck and feeds them into machine that picks hops from vines. Hooks sack onto discharge end of picking machine to fill sack with hops. Carries sacks of picked hops to kiln bay and dumps hops onto floor to dry. Spreads hops on kiln floor, using rake, and turns and levels them while they are drying. Shovels dried hops into cooling bin or onto conveyor leading to baling room. May be designated according to work performed as Dumper, Hops; Harvest Hand, Hops; Hop Pruner; Hop Trainer; Kiln Layer; Weaver.

DOT 405.887-014 Farm Hand, Tobacco (agric.)

Tobacco hand.

Plants, cultivates, harvests, and cures tobacco, working as crewmember: Sows tobacco seed in beds and covers beds with cloth or glass to protect seedlings from weather. Pulls tobacco plants from seedbeds and transplants them in field. Shields shade tobacco from sunlight and insects, by setting up poles in tobacco field, connecting tops of poles with wire, and covering tobacco field with netting. Chops weeds from tobacco field, using hoe. Breaks tops and suckers from plants to allow leaves to broaden. Primes (picks) mature leaves from plant or cuts mature plants, using hatchet or knife. Places primed or cut tobacco on sled or basket and drags it out of field. Loads tobacco onto wagon or

truck and hauls it to shed or barn for curing. Sews tobacco leaves to slats by hand or by machine, strings tobacco leaves on slats by looping string alternately around leaf butts and slat until slat is filled, or bales leaves into curing racks. Hangs slats or racks of tobacco leaves in tiers within curing shed or barn. Strips cured tobacco leaves from slats or racks, and sprays leaves with water to render them more pliable. Ties leaves in hands (bundles of leaves tied at butts), and packs them in containers. May be employed only to harvest tobacco, and be designated as Harvest Hand, Tobacco, or may be designated according to work performed as Hander, Flue Cured; Looper, Bright Leaf; Tobacco Houser; Tobacco Sewer, Hand; Tobacco Sprayer.

DOT 405.887-018 Harvest Hand, Broomcorn (agric.)

Harvests broomcorn, working as crew member: Cuts broomcorn straw from stalk, using knife, or pulls straw from stalk. Places straw in windrows or sticks it between branch and stalk to dry. Bundles dried straw into sheaves, using twine or rubber bands. Piles sheaves in stacks or loads them onto trucks. May be designated according to work performed as Broomcorn Cutter; Broomcorn Puller; Broomcorn Tier.

DOT 405.887-022 Harvest Hand, Peanut (agric.)

Shakes dirt from peanut vines dug up by plow, and stacks vines around stakes by hand or by use of pitch fork. Places leaves of vines away from stake to protect peanuts from weather while drying. May be designated according to work performed as Hand Shaker; Peanut Stacker.

DOT 405.887-026 Harvest Hand, Sugarcane (agric.)

Harvests sugarcane, working as crew member: Cuts sugarcane, using machete. Strips leaves from cane stalks, using hooked end and blade of machete, and places stalks in piles. Loads stalks on wagon or cart by hand or by use of hoist. May burn cane field to remove leaves and trash and cut fire breaks to prevent fire from spreading. May be designated according to duties performed as Cane Burner; Cane Cutter; Cane Loader; Fire-Break Cutter.

DOT 406.181-018 Mushroom Grower (agric.)

Manages farm to grow mushrooms in caves, mines, or specially constructed dark buildings: Selects compost of horse stable manure or mixture of hay and crushed corncobs for use as growing medium for cultivation of mushrooms. Pasteurizes compost and transfers it to growing trays. Places mushroom spores in agar to germinate spawn (mycelium). Transfers spawn to containers of sterile rye grain and sets temperature at required level for prescribed number of days. Broadcasts (distributes) mature spawn uniformly over compost in growing trays, and adjusts temperature and humidity in growing rooms to allow spawn to grow through compost. Covers compost in each tray with ribbon of screened topsoil casing that retains moisture in compost and stimulates formation of mushrooms. Waters trays periodically and sprays water on walls of growing room regularly to maintain required humidity level. Harvests mushrooms and negotiates with buyers for sale of crop. Hires and supervises Farm Hands, Mushroom engaged in planting, cultivating, and harvesting crop.

DOT 406.181-018 Seed Grower (agric.)

Seedman.

Plants, cultivates, and harvests pure varieties of seed for sale to commercial seed houses or other farmers and growers: Arranges with commercial seed houses to arrange for growing seed, such as row or field crop seed, vegetable seed, or lawn seed. Selects and purchases seed stock. Operates farm machinery to plow, disk, and harrow seed beds and plant seed [Farm-Equipment Operator]. Cultivates plants for weed and moisture control, using cultivator and rotary hoes, or sprays plants with chemical solutions or dusts for weed control to prevent contamination of seed crop with other varieties of seed. Harvests seed by hand or using combines or pickers. Packs seed in bags or containers and delivers seed to commercial houses. May select and inbreed plants until specific inbred line is produced, using various breeding techniques, such as crossbreeding, backcrossing, and outcrossing, to develop new varieties of plants resistant to disease.

DOT 409.137-010 Picking-Crew Foreman (agric.)

Crew foreman; foreman contractor; harvest foreman.

Supervises and coordinates activities of workers engaged in picking fruits, vegetables, and row crops, such as carrots and cotton, and loading and stacking filled containers on trucks: Examines crop to determine degree of maturity. Directs workers in methods of picking crops and specifies size of fruit or vegetable to pick. Insures that equipment, such as ladders and containers, are available to workers. Directs distribution of field boxes along rows for convenience of workers. Checks harvested products for size, quality, and variety and informs workers of discrepancies. Oversees loading and stacking filled containers

on trucks. May pay employees. May be designated according to type of crops harvested as Cauliflower-Harvesting-and-Packing Foreman; Lemon-Picking Foreman; Orange-Picking Foreman; Row Boss, Picking; Watermelon-Harvesting Foreman.

DOT 429.885-010 Laborer, Seed Corn (agric.)

Tends equipment that shells, treats, and bags seed corn: Removes ears of corn from drier and feeds them into machine that automatically separates kernels from cob. Fills treating tank with insecticides and preservatives and starts machine that mixes them with seed corn. Attaches sack to filling machine spout, opens spout to fill sack with seed corn, and closes spout when specified weight is registered on scale indicator. Sews end of sack, and stencils identifying information on sack.

DOT 465.887-018 Laborer, Orchard Fumigation (agric.)

Assists Fumigator, Orchard (DOT 465.884) in placing and removing tents used to cover fruit trees during fumigation with hydrocyanic-acid gas. Weighs, handles, and mixes necessary chemicals or cares for drums of liquefied gas. Perform other duties as described under Helper (any ind.).

O.E.
01.0103 Farm Mechanics

(See the category 01.03 Agricultural Mechanics)

O.E.
01.0104 Farm Business Management

Planned learning activities which are concerned with farm resource analysis, accounting, production, financing, resource

acquisition, purchasing, farm inputs, performance records, contracts, farm marketing, and maintenance. The results of these learning activities are applied to formulating decisions involved in managing a farm or ranch operation.

DOT 180.168-022 General Manager, Farm (agric.; whole. tr.)

Manages farm concerned with raising, harvesting, packing, and marketing farm products for corporations, cooperatives, and other owners: Analyzes market conditions to determine acreage allocations. Negotiates with bank officials to obtain credit from bank. Purchases farm machinery and equipment and supplies, such as tractors, seed, fertilizer, and chemicals. Hires and discharges personnel. Prepares financial and other management reports. Supervises office personnel engaged in preparing payrolls and keeping records. Visits orchards and fields to inspect and estimate maturity dates of crops. Confers with purchasers, and determines when and under what conditions to sell produce. May specialize in management of cooperative association, packing house, or public farm market.

DOT 409.168-010 Manager, Farm (agric.)

Farm overseer; manager, agriculture; superintendent, farm.

Manages farm on behalf of employer, applying knowledge of management and farming techniques: Confers with landowner to plan sequence of farming activities, according to size of farm, labor supply, machinery and equipment available, and operating costs. Orders supplies, such as seeds, fertilizer, and farming equipment needed to carry out farming plan. Plans and directs crop rotation

to insure maximum production from soil according to soil analysis and past crops grown. Directs activities of Farm Hands engaged in laying out, planting, cultivating, and harvesting crops, and in maintaining machinery. Informs landowner of progress and condition of crops and estimated yield. Records operating expenses, such as labor costs, materials used, machinery repairs, and equipment purchased to determine profits and initiate future farming activities. May work on commission basis.

DOT 409.181-010 Farmer, Tenant (agric.)

Farm renter.

Plants, cultivates, and harvests crops on land rented from another: Determines farm machinery and tools, livestock, labor, seed, and fertilizer needed to conduct farming operation, according to size of farm and crops grown. Furnishes machinery and tools, livestock, labor, seed, and fertilizer required for farming operation. Plows, harrows, fertilizes, plants, cultivates, and harvests crops, using animal- or tractor-drawn equipment. Pays specified amount of cash or fixed quantity of crops for use of land. May determine crops to be grown and schedule planting, cultivating, and harvesting. May agree to plant crops at specific dates when part of crops is used for rent. Owner may furnish part of fertilizer when portion of crops is used as rent payment.

PART II

AGRICULTURAL SUPPLIES/SERVICES - OE 01.02 - 1

1. Agricultural Chemicals - 01.0201 - 7
2. Feeds - 01.0202 - 9
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INSTRUCTIONAL PROGRAM

O.E.
01.02 **Agricultural Supplies/Services**

Subject matter and learning experiences concerned with preparing students for occupations involved in providing consumable supplies used in the production phase of agriculture, including processing, marketing, consulting, and other services.

DOT 049.384-010 Biological Aid (agric.)

Aids research workers to carry out experiments in bacteriology, plant pathology, mycology, and other agricultural and biological sciences, performing routine tests and experiments concerned with greenhouses, experimental plots, hives of bees, and experimental equipment.

Feed-Research Aid (grain & feed mill.)

Feeds rations of experimental feeds to animals, such as poultry, dogs, and cows, and compiles data on growth, productivity, and health of animals: Weighs feed rations and livestock and gathers eggs and milks cows. Observes livestock to note changes in health and preference for certain foods. Records data for evaluation by professional personnel. Waters stock and cleans pens.

DOT 096.128-014 County Agricultural Agent (gov. ser.)

Agricultural agent; county adviser; county agent; county demonstrator; extension agent; extension-service agent; extension worker; farm adviser; farm agent; farm-bureau agent; farm demonstrator.

Instructs and advises farmers concerning agricultural problems and informs commercial and community organizations of available services to promote extension program: Collects and analyzes, and evaluates agricultural data; plans and develops techniques; and advises farmers to assist in solving problems, such as crop rotation and soil erosion. Delivers lectures and prepares articles concerning subjects such as farm management and soil conservation. Demonstrates practical procedures used in solving agricultural

problems Discusses extension program with representatives of commercial organizations, county government, and other groups to inform them of program services and to obtain their cooperation in encouraging use of services. Prepares activity, planning, and other reports and maintains program records. Prepares budget requests, or assists in their preparation. May supervise and coordinate activities of other county extension workers. May direct 4-H Club activities [Four-H Club Agent (education)].

DOT 180.168-014 Artificial-Breeding Distributor (agric.)

Manages distributorship concerned with collecting and packaging bull semen and inseminating cows: Hires, trains, and supervises Artificial-Breeding Technician. Prepares and issues advertising, speaks at farm organization meetings; and judges cattle shows to develop contacts with potential farmer-customers and to promote artificial breeding of cattle. Trains technicians in product knowledge, artificial insemination methods, and sales techniques. Organizes and coordinates sales and service functions and publishes material to motivate technicians and inform them of current breeding developments. Keeps customers' accounts and breeding and herd records for distributorship. Collects accounts due. Orders supplies, equipment, and promotional materials for technicians. May perform breeding services.

DOT 187.168-018 Director, Agricultural Labor Camp (profess. & kin.)
Agricultural-labor-camp foreman; manager, farm labor camp; superintendant, camp.

Coordinates activities of workers concerned with preparing and operating camp for seasonal agricultural workers: Supervises

directly or through subordinates workers concerned with maintenance of buildings and facilities, preparation of meals and type of food served, compliance with State health and fire regulations, and assignment of living quarters. Secures medical care for sick or injured occupants. Helps underage employees to obtain health and birth certificates and work permits. Administers recreation programs. Keeps records and prepares periodic reports of camp operation. May recruit and employ workers prior to camp opening.

DOT 096.128-018 Four-H Club Agent (educational)

Organizes, directs, and coordinates educational projects and activities in youth organizations known as 4-H Clubs: Recruits and trains volunteer leaders to plan and guide 4-H Club program to meet needs and interests of individuals and community. Directs selection of educational projects, such as sewing, woodworking, photography, and livestock raising. Procures, develops, distributes, and presents teaching materials, such as visual aids and literature for educational projects. Arranges for 4-H Clubs to exhibit or otherwise participate in events, such as State Fair and State Four-H Club events. Develops and maintains recognition and incentive program for members and leaders of 4-H Clubs.

DOT 467.384-014 Artificial Breeding Technician (agri.)
Breeding technician.

Collects and packages bull semen for artificial insemination of cows: Attaches rubber collecting sheath to genital organ of tethered bull, and stimulates animal's organ to excite ejaculation. Examines semen, using microscope, to determine density and motility of gametes, and dilutes semen with prescribed diluents according

to formulas. Transfers required amount of semen to container, using titration tube, and labels it with identifying data, such as date taken, source, quality, and concentration, and records similar data on file cards. Packs container of semen in dry ice or liquid nitrogen for freezing and storage or shipment. May inseminate cows [Artificial Inseminator].

DOT 467.384-010 Artificial Inseminator (agri.)

Inseminator.

Injects prepared bull semen into vagina of cows to breed them: Observes animal in heat to detect approach of oestrus. Selects semen specimen according to breeding chart and pours semen into breeding syringe. Cleans cow's vulva with soap, water, and antiseptic solution. Inserts nozzle of syringe into vagina and depresses syringe plunger to inject seminal fluid. Maintains log of semen specimens used and cows bred. May exercise animal to induce or hasten oestrus.

DOT 421.384-010 Agricultural Aid (agric.)

Cultivates crops and attends to animals according to specific instructions of research workers to carry out experiments in agronomy, animal husbandry, or some other branch of agriculture: Feeds and waters animals and cleans kennels. Prepares soil and plants, cultivates, and harvests crops [Farm Hand]. Collects and preserves seeds, and weighs and stores crop.

DOT 421.883-010 Farm Hand, General (agri.)

Farm hand, regular; farm-wage hand; hand; hired hand; hired man; wage hand.

Works on farm devoted to diversified agriculture, performing duties requiring knowledge of livestock and crops and maintenance of structures and equipment: Prepares soil for planting by plowing, harrowing, and fertilizing; seeds, cultivates, sprays, and harvests crops, using a variety of horse- and tractor-drawn machinery [Farm-Equipment Operator]. May irrigate crops [Irrigator II]. Tends livestock and poultry, observing general condition and administering simple medications to animals and fowls. Hauls feed to livestock during grass shortage and winter months. Operates, repairs, and maintains farm implements and mechanical equipment, such as tractors, gang plows, ensilage cutters, hay balers, cottonpickers, and milking machines. Repairs farm buildings, fences, and other structures. May haul livestock and produce to market [Truck Driver, Heavy (any ind.); Truck Driver, Light (any ind.)]. Usually works year-round and may supervise casual and seasonal help during planting and harvesting. Types of farm hands: DOT 401.884; 401.887; 402.883; 402.887; 403.883; 403.887; 404.883; 404.884; 404.887; 405.887; 406.887; 411.884; 412.884; 413.884; 419.884; 421.887.

DOT 469.158-010 Harvest Contractor (agric.)

Contract, picker.

Contracts with farmers, or groups of farmers to provide crews for crop harvesting: Contacts crop growers to determine time and method for harvesting. Inspects crops to determine factors, such as approximate acreage yields, land contours, road accessibility, loading requirements, and moving and distance to processing area. Prepares and submits bids for crop harvesting. Recruits or arranges

for recruitment of workers to harvest crop. Supervises crews engaged in harvesting, loading, moving, and storing crops. May supply mechanical harvesting equipment. May prepare production records and payroll for crew.

O.E.
01.0201 Agricultural Chemicals

The study of a variety of chemicals, drugs, and related products which are associated with the production of animals and plant products. Usually included for study are various types of chemicals used to prevent, control, or cure animal and plant diseases and to control pests.

DOT 389.138-010 Exterminator Supervisor (bus. ser.)

Supervises and coordinates activities of Exterminators (any ind.) engaged in destroying vermin with insecticides or fumigants: Inspects infested structure and recommends treatment, basing diagnosis on knowledge of pests' habits, fumigants and insecticides, and structural conditions. Advises building owners on preventive measures against reinfestation.

DOT 465.137-010 Blight-Control Foreman (agric.)

Supervises and coordinates activities of workers engaged in control of blight-producing diseases, such as white-pine blister rust and noxious insect infestations: Assigns workers to duties such as spraying trees and bushes with antibiotics, chemicals, and pesticides, and grubbing and destroying bushes, such as currant, gooseberry, and barberry. Keeps record of acreage covered and number of bushes and trees treated. May locate infested areas. Performs other duties as described under Foreman (any ind.).

DOT 465.137-014 Spray Foreman (agric.)

Supervises and coordinates activities of workers engaged in mixing chemicals and spraying crops to destroy harmful insects and to control fungus diseases. Directs workers in methods of applying chemical solutions. Keeps records of chemicals used. May repair spray equipment. Performs other duties as described under Foreman (any ind.).

DOT 465.381-010 Scout (agric.)

Pest-control worker.

Locates and exterminates plant and tree pests and diseases: Searches fields, brush, trees, and warehouses to locate plant pests, such as witchweed, boll weevil, Japanese beetle, soybean cyst nematode, fire ant, gypsy moth, white-fringed beetles, and army worms. Mixes exterminating agents such as herbicides, insecticides, and fungicides, according to type of infection or infestation to be treated. Applies exterminating agents using spray equipment. Destroys clusters of gypsy-moth eggs by painting or spraying clusters with creosote. Collects samples of infected soil or plants for laboratory analysis. Marks infested area to determine effectiveness of treatment. May specialize in treatment of one type of infestation, such as gypsy moth or witchweed.

DOT 465.781-010 Weed Inspector (agric.)

Locates and destroys noxious weeds in rural municipality: Inspects roadsides and ditches for noxious weeds and notifies landowners in areas where suspected weeds are located. Identifies weeds and prepares poisonous solution required to destroy them. Sprays infected area with solution.

DOT 465.781-010 Fumigator, Orchard (agric.)

Kills insect pests on fruit trees by treatment with hydrocyanic-adic gas: Places tent of canvas or other fabric over entire tree. Generates gas by pouring acid on sodium cyanide in jar or makes use of drums compressed or liquefied gas discharged into tent through hose. Exposes each tree to gas for specified period.

O.E.
01.0202 Feeds

The study of the business of processing and distributing feeds and feedstuffs.

DOT 262.358-014 Salesman, Grain-and-Feed Products (whole. tr.)
See under Salesman, Food Products.

Sells grain and feed-mill products, such as flour, feed, meal, and cereals, performing duties as described under Salesman (ret. tr.; whole. tr.). Suggests feed changes to improve breeding of fowl and stock. Draws up contracts to furnish customers flour for fixed period and price. May be designated according to product sold as Salesman, Commercial Feed; Salesman, Flour and Cereals.

DOT 469.168-010 Contractor, Field Hauling (agric.)

Arranges with farm owners for transportation of harvested crops from fields to packing house or other locations: Determines number and type of vehicles needed according to type and quantity of harvested crop. Supervises crew members engaged in spotting vehicles in field and loading harvested crops into trucks or trailers. Coordinates loading of vehicles with activities of harvesting crew to insure crops are moved from field without

damage from weather. Recruits, hires, and discharges crew members and maintains time records. May arrange for transportation of workers. Performs other duties as described under Foreman (any ind.).

DOT 520.885-122 Feed Mixer (grain & feed mill.)

Batch-mixer operator; feeder operator; mash feed mixer operator; mixer man.

Tends machine that mixes stock or poultry feed according to formula and transfers it to packing machine or storage: Dumps specified number of sacks of meal, mash, grain, and meat scrap into machine hopper. Weighs ingredients, such as minerals and vitamins, and dumps them into hopper. Starts machine to mix ingredients, and starts elevators and conveyors to transfer feed to storage tanks or packing machine hoppers. May match color of mix with standard sample by adjusting automatic feeder controls to regulate amount of ingredient in mix. May adjust nozzles, rheostat, or steam controls to spray heated molasses onto feed. May record weight of feed mixed or ingredients used. May be designated according to type of feed mixed as Dairy-Feed-Mixing Operator; Poultry-Feed-Mixer Operator; or according to ingredient mixed with feed as Limer; Molasses-Feed Mixer.

DOT 520.886-302 Feed-Mixer Helper (grain & feed mill.)

Feeder loader; hopper loader; mixer-machine feeder; mixer-man helper.

Assists Feed Mixer in preparing stock and poultry feed by dumping sacks of wheat, corn, or other ingredients into hopper of mixing machine. Stirs ingredients in hopper, using paddle, to

facilitate flow into mixer. Performs other duties as described under Helper (any ind.).

DOT 521.885-302 Processor, Grain (grain & feed mill.)

Cleaning-house man; grain cleaner; smutter.

Tends grain separating, washing, and scouring machines that remove foreign matter, such as dirt, smut, and rust, from grain preparatory to milling: Adjusts slides in bin spouts and starts elevators to route grain from storage bins to machines. Turns valves to regulate water temperature and water level in washer, to adjust air suction to remove dust from separators, and to regulate flow of air through drier. Turns wingnuts to adjust angle of separator screens according to grain flow and amount of refuse. Hooks bag under end of screen to catch refuse. Starts machines to process grain and observes flow entering machines to prevent overloading. Examines processed grain to verify cleanliness. Pounds chutes with mallet to dislodge clogged grain. May tend separating equipment only and be designated as Separator Tender.

DOT 521.886-026 Custom-Feed-Mill-Operator Helper (grain & feed mill.)

Assists Custom-Feed-Mill Operator in milling grain and feed to customer specifications. Sacks and loads mill products on truck and delivers them to customer. Performs other duties as described under Helper (any ind.).

DOT 529.138-026 Superintendent, Grain Elevator (corn prod.; grain & feed mill; malt liquors)

Supervises and coordinates activities of workers engaged in unloading, loading, storing, cleaning, and blending of grain for

milling and shipment: Inspects sample of grain from incoming shipment to verify variety of grain with invoice and route to designated storage bin according to variety and protein content of grain. Prepares switching orders for guidance of train crews in moving grain cars to unloading pits according to mill requirements. Observes unloading and transportation of grain by bucket elevators and conveyors to storage tanks. Inspects grain to determine cleaning requirements and directs processing of grain to prepare it for milling. Performs other duties as described under Foreman (any ind.).

O.E.
01.0203 Seeds

The study of the business of producing, processing, and distributing seeds.

DOT 040.381-014 Seed Analyst (profess. & kin.)

Farm-seed specialist.

Tests seed for germination, purity, and weed content: Plants definite number of seeds in box of pure soil and counts number of plants that grow to calculate percentage of germination. Inspects seed with magnifying glass or microscope for chaff, bits of wood, and weed content (any seed other than the one under consideration).

O.E.
01.0204 Fertilizers (Plant Food)

The study of the principles concerned with the analysis, sale, and application of chemical elements known to be necessary for plant growth.

O.E.
01.0299 Agricultural Supplies/Services, Other

Include here other subject matter and experiences emphasized in agricultural supplies/services which are not listed above. (Specify.)

DOT 073.381-010 Laboratory Technician, Veterinary (medical ser.)

Prepares vaccines, biologicals, and serums for prevention of animal diseases: Innoculates embryo chicks, broths, or other bacteriological media with organisms. Incubates bacteria for specified period and prepares vaccines and serums by standard laboratory methods. Tests vaccines for sterility and virus inactivity and bottles them. Examines meat and dairy products to determine if products meet standards of quality and purity. Prepares standard volumetric solutions and reagents used in testing, and cleans laboratory equipment.

DOT 282.358-010 Salesman, Veterinarian Supplies (whole. tr.)

Sells veterinarian supplies, such as medical supplies and equipment, and packaged food, performing duties as described under Salesman (ret. tr.; whole. tr.).

DOT 356.381-010 Horseshoer (any ind.)

Blacksmith; farrier; shoer.

Forges metal bars into horseshoe and fits and nails shoe to hooves of horses and mules, using calipers and handtools: Removes defective shoe from hoof, using nail snipper and pincers. Examines hoof to detect conditions, such as bruises and amount of trimming required. Trims and shapes hoof, using knife and snippers.

Measures width and length of hoof, using calipers. Selects metal bar for shoe, according to type of work done by animal and condition of hoof, and cuts bar according to hoof measurements, using bolt cutter. Shovels coke into forge, lights forge, and starts bellows to heat forge. Heats bar in forge until color of bar indicates forging temperature. Positions bar on anvil, using tongs, hammers bar into shape of shoe, and punches nail holes in shoe. Positions and nails shoe on hoof, using hammer and pincers. Trims hoof flush with shoe, using rasp. May place leather pad and sponge between shoe and hoof to protect hoof.

DOT 356.874-046 Veterinary-Hospital Attendent (medical ser.) Veterinary assistant.

Cares for animals under treatment in animal hospital for disease, injury, or for production of serums: Leads, wheels, or carries animal from quarters to treatment room. Lifts animal onto treatment table and applies restraints or holds it during treatment. Sterilizes surgical instruments and other equipment, such as rubber gloves, syringes, and test tubes, using germicides and autoclave. Administers anesthetic, medications, and prescribed nursing care, under direction of Veterinarian. Measures, mixes, grinds, and chops specified ingredients to prepare food, and feeds animals. Bathes and brushes animals and clips their hair and nails. Sweeps, dusts, mops, and hoses hospital rooms and animal quarters. May receive clients, answer telephone, make appointments, and accept payment on accounts.

DOT 404.884-014 Tree Pruner (agric.)

Pruner; tree trimmer.

Cuts away dead and excess branches from fruit, nut, and shade trees: Prunes trees with handsaws, pruning hooks and shears, and long-handled clippers, or by using truck equipped with hydraulic lifts, hydraulic pruners, and power pruners. Applies tar or other protective substances to cut surfaces to seal them against insects. Climbs trees, using climbing hooks and belts, or uses ladders to gain access to work area. May specialize in removing dead branches or excess wood from fruit trees and be designated as Orchard Pruner.

DOT 412.887-018 Poultry Debeaker (agric.)

Debeaker.

Trims and sears beaks, toes, and wings of baby chicks to prevent cannibalism, flying, and fighting: Inserts chick's beak in guide hole of trimming machine and depresses pedal to cut off and sear tip of beak or trims and sears chick's beak, using hand shears. Trims and sears chick's toes and wings by pressing them against hot wire.

DOT 412.387-010 Poultry Technician (agric.)

Inspects poultry farms to insure that growers comply with contract standards for feeding and housing birds and controlling disease: Tours poultry barns, incubation units, and related facilities to observe sanitation and protection from weather. Insures that specified feeds are being administered according to prescribed schedules. Inspects birds for evidence of disease and weighs them to determine speed of growth. Gathers samples of

feeds, poultry hormones, antibiotics, and vitamin supplements or other growth-inducing agents to determine compliance with regulations governing toxicants. Reports failure of growers to meet standard and advises growers how to improve conditions and practices to meet requirements. May test feeds and supplements, using standard laboratory equipment and procedures.

DOT 412.687-014 Chicken Sexer (agric.)

Examines genital organs of baby chicks to determine their sex by turning back fold of skin on anus or by inserting illuminated viewer into anus. Places chicks in boxes according to sex.

DOT 412.687-010 Chick Grader (agric.)

Poultry culler.

Grades baby chicks according to appearance and separates healthy from deformed or diseased chicks: Examines baby chicks for curled toes, blindness, misshaped beaks, discolored downs, and abdominal rigidity. Examines chicks for symptoms of diseases, such as bronchitis and navel infection. Segregates healthy from diseased or deformed chicks. Places deformed chicks in incinerator.

DOT 412.884-022 Poultry Vaccinator (agric.)

Vaccinates poultry for diseases, such as pox and bronchitis, by placing vaccine in drinking water, dusting air with vaccine powder, injecting vaccine in eye, leg, vent, wing web, or nostril of bird, using medicine dropper or hypodermic needle. May be designated according to poultry vaccinated as Chicken Vaccinator.

DOT 429.228-010 Poultryman, Technical Adviser (agric.)

Field adviser; serviceman, poultry.

Instructs and advises Poultrymen, Egg and Poultrymen, Meat in developing programs for disease prevention and control, for building and equipment maintenance, and to improve poultry raising: Inspects poultry houses for sanitation, ventilation, and adequacy of facilities, and suggests improvements that increase net output and minimize losses. Recommends changes or additions in feed formulas to improve quality and quantity of meat and eggs. Prepares reports of findings, recommendations made, and actions taken. May address Granges, associations, and cooperatives on problems or subjects of mutual interest to poultry producers.

DOT 467.138-010 Wool Shearer, Contract (agric.)

Supervises crew of Sheep Shearers and contracts with Sheep Ranchers to shear sheep: Recruits, hires, trains, and supervises crew who shear sheep and perform related duties. Provides, sets up, and tests shearing equipment. Arranges for transportation, living quarters or camp site, food, and other accommodations for crew. Maintains time, production, and other records. Pays crew members. May participate in shearing sheep.

DOT 467.384-014 Artificial-Breeding Technician (agric.)

Refer to DOT 467.384.

DOT 467.384-010 Artificial Inseminator (agric.)

Refer to DOT 467.384.

DOT 467.384-018 Blood Tester, Fowls (agric.)

Tests blood of poultry to ascertain presence of pullorum disease: Picks vein in bird's wing, using needle. Collects blood on wire loop and drops blood into pullorum reactor. Examines blood for specks that indicate presence of pullorum disease. Removes diseased bird from flock.

DOT 467.384-022 Poultry Inseminator (agric.)

Artificial-insemination technician.

Collects semen from roosters and fertilizes hens and eggs: Pinions bird and collects semen in vial. Examines semen, using microscope, and records density and motility of gametes. Measures specified amount of semen into calibrated syringe and inserts syringe into inseminating gun. Injects semen into oviduct of hen through hole in eggshell. Records dates of insemination of hens.

PART III

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INSTRUCTIONAL PROGRAM

O.E.
01.03 **Agricultural Mechanics**

A combination of subject matter and activities designed to develop abilities necessary for assisting with and/or performing the common and important operations or processes concerned with the selection, operation, maintenance, and use of agricultural power, agricultural machinery and equipment, structures and utilities, soil and water management, and agricultural mechanics shop, including kindred sales and services.

O.E.
01.0301 Agricultural Power and Machinery

A combination of subject matter and experiences designed to develop in pupils the abilities to (1) recognize and identify the fundamental principles of selection, operation, service maintenance, repair, and safety in agricultural power--engines, electricity, and hydraulics, and (2) plan, install, service, assemble, adjust, operate, and repair farm machinery. (See also 16.010202 Agricultural Machinery and Equipment under Technical Education.)

DOT 277.251-010 Service Salesman, Milking Machines (ret. tr.)

Sells and repairs milking equipment: Calls on farmers to solicit repair business and to sell new milking equipment, such as vacuum pumps, buckets, pipelines, and replacement parts. Demonstrates milking machines. Cuts and threads pipe and attaches fittings, using plumber's tools, to install pipelines. Cleans and flushes pipelines, and repairs pulsators and vacuum pumps.

DOT 404.885-010 Winnowing-Machine Operator (agric.)

Tends winnowing machine that removes foreign materials, such as dust, leaves, dead berries, and twigs from blueberries: Starts machine and pours freshly picked blueberries into hopper of machine. Places container at discharge end of machine. Makes minor adjustments to motor and blowers of machine.

DOT 409.883-010 Farm-Equipment Operator (agric.)

Drives and controls farm equipment to till soil and to plant, cultivate, and harvest crops: Hitches soil conditioning implement to tractor and operates tractor and towed implement to furrow and

grade soil. Drives tractor and operates designated towed equipment to plant, fertilize, dust, and spray crops. Prepares harvesting machine by adjusting speeds of cutters, blowers, and conveyors and height of cutting head or depth of digging blades according to type, height, weight, and condition of crop being harvested, and contour of terrain. Attaches towed- or mounted-type harvesting machine to tractor, using handtools, or drives harvesting machine to cut, pull up, dig, thresh, clean, chop, bag, or bundle crops. When towing or driving machine to perform combined harvesting operations, may be designated Combine Operator. May drive team to pull farm equipment and be designated Teamster. May operate and maintain several types of farm equipment and be designated All-Round Farm-Machinery Operator. May be designated according to crop specialty and farm equipment operated as Bean-Field Worker; Corn-Picker Operator; Disk-Plow Operator; Tractor Operator. See Volume II for additional titles.

DOT 424.132-010 Hop-Picking-Machine Operator (agric.)

Operates portable or stationary machine to strip hops from vines, and supervises and coordinates activities of workers engaged in harvesting hops: Installs and adjusts belts, pulleys, drapers (canvas elevators), and drive chains on machine, using handtools. Determines work procedures and assigns workers to duties, such as unloading hopvines from trucks, feeding vines into machine, and sorting and bagging stripped hops. Starts machine, and adjusts speed of blowers and drapers to obtain optimum production according to weight and moisture content of vines and hops. Replaces defective machine parts, using handtools. May be designated

according to machine operated as Hop-Picking-Machine Operator, Horizontal; Hop-Picking-Machine Operator, Portable; Hop-Picking-Machine Operator, Stationary; Hop-Picking-Machine Operator, Vertical

DOT 424.883-010 Heavy-Equipment Operator (agric.)

Operates heavy equipment, such as crane loader, dump truck, and manure-turning machine, to move and treat manure and dirt for use in mushroom beds: Scoops wet manure from wet pit and dry manure from dry stack, operating crane loader, and loads manure onto dump truck. Hauls manure to shed-covered area and dumps it in row. Dumps load of dirt on manure, and operates manure-turning machine to turn and mix manure with dirt and specified additives. Drives scoop loader to push manure from place to place on mushroom farm and to load manure onto trucks.

DOT 424.886-010 Chopper Operator, Stationary (agric.)

Feeds farm products, such as stripped hop vines, hay, straw, corn stalks, and mint hay into machine that chops it and blows it into storage bin or silo: Pitches material onto feed conveyor, using pitchfork. Rakes up spilled material or material piled near machine, and places it on feed conveyor. Cleans and lubricates machine. May change cutters and make minor repairs, using handtools.

DOT 620.281-094 Tractor Mechanic (any ind.)

Diagnoses mechanical failures of and repairs tractors and tractor components according to manuals, factory specifications, and knowledge of engine performances, using handtools, power tools, and testing instruments: Attaches compression, ignition, and timing test instruments to certain parts of the tractor, using

clamps and handtools. Starts engine dials and reads meters and gages of testing equipment to diagnose engine malfunction. Removes and disassembles engine, transmission, and clutches, using hoists, jacks, and mechanics' handtools. Inspects parts for damage, and verifies dimensions and clearances of parts for conformance to factory specifications, using gages, such as calipers, and micrometers. Replaces or repairs worn or damaged parts. Grinds valves, relines and adjusts brakes, tightens body bolts, alines wheels, and tunes engine. May weld defective body or frame parts.

DOT 620.884-050 Tractor-Mechanic Helper (any ind.)

Assists Tractor Mechanic in repairing tractors and tractor components, using handtools: Installs jacks and hoists to raise equipment and lift dismantled assemblies. Disassembles and assembles tractor parts, using mechanics' handtools. Cleans tools and parts with naphtha, gasoline, or other cleaning compounds. May wash and lubricate equipment. Performs other duties as described under Helper.

DOT 624.381-014 Farm-Machinery Set-Up Man (whole. tr.)
Set-up man.

Erects and assembles farm machinery for use in field: Uncrates components at freight station or dealer's warehouse, using crowbar and hammer. Assembles and adjusts machinery according to specifications, using handtools. Lubricates moving parts. May deliver farm machinery to purchasers.

DOT 624.381-018 Inspector and Tester (agric. equip.)

Mechanical inspector; tester.

Inspects agriculture equipment, such as tractors, combines, and balers for missing, defective, or improperly installed parts and operational malfunctions: Observes operation of equipment being driven around test area or on treadmill to detect defects, such as loose fittings, improper assembly, malfunctioning parts, or faulty controls, as indicated by noise, leaks, or irregularities in braking, steering, or transmission mechanisms. Assigns Assembly Repairman to defective equipment, explains defects, and suggests method of repair. Examines equipment for paint defects, incorrect decal application, missing tools, and faulty lights. Records cause and type of defect and repair work performed. May be designated according to type of inspection as Treadmill Inspector or type of equipment inspected as Combine Inspector.

DOT 624.281-010 Farm-Equipment Mechanic I (agric.)

Farm mechanic.

Maintains, repairs, and overhauls farm machinery, equipment, and vehicles, such as tractors, harvestors, pumps, tilling equipment, trucks, and other mechanized, electrically powered, or motor-driven equipment, on farms or in farm-equipment repair shops: Examines machines, motors, gasoline and diesel engines, and equipment, visually and aurally, for operational defects and dismantles defective parts, using handtools and machine tools, such as drill press, lathe, milling machine, woodworking machines, welding equipment, grinders, and saws. Reassembles, adjusts, and lubricates machines and equipment to insure efficient operation. May install

and repair wiring and motors to maintain farm electrical system. May install and repair plumbing and other farm structures. May assemble and erect new farm machinery and equipment. May be designated according to equipment maintained as Viner Mechanic.

DOT 624.281-014 Farm-Equipment-Mechanic Apprentice (agric.)

Farm-mechanic apprentice.

Performs duties as described under Apprentice (any ind.)

DOT 624.381-010 Farm-Equipment Mechanic II (agric.)

Farm mechanic; field-equipment-maintenance mechanic, farm.

Services, adjusts, and makes minor repairs on farm vehicles, machinery, and equipment, such as tractors, trucks, automobiles, harvesters, combines, silo fillers, plows, and similar equipment, using handtools: Observes and examines machinery and parts in operation to detect malfunctioning or defective units. Replaces components, such as carburetors, fuel pumps, generators, ignition points, and spark plugs. Adjusts timing of motors, lubricates, washes, paints, and cleans vehicles and attachments, using hand-tools. May assist other workers in more complex maintenance tasks, such as overhaul of machinery and equipment, repair and erection of buildings and structures, plumbing repair, and electrical work on farm.

DOT Apprentice (any ind.) (Number listed with each area)

A worker who learns, according to a written or oral contractural agreement, a recognized skilled craft or trade requiring two or more years of on-the-job training through job experience supplemented by related instruction, prior to time that he may be

considered a qualified skilled worker. Apprentices are seldom over 30 years of age. High school or vocational school education is generally a prerequisite for entry into an apprenticeship program. Provisions of apprenticeship agreement regularly include length of apprenticeship; a progressive scale of wages; work processes to be taught; and amount of instruction in subjects related to the craft or trade, such as characteristics of materials used, selected shop mathematics, and blueprint reading. Apprenticeability of a particular craft or trade is best evidenced by its acceptability for registration as a trade by a State apprenticeship agency or the Federal Bureau of Apprenticeship and Training. Generally, where employees are represented by a union, apprenticeship programs come under the guidance of joint apprenticeship committees composed of representatives of the employers or the employer association and representatives of the employees. These committees may determine need for Apprentices in a locality and establish minimum apprenticeship standards of education, experience, and training. In instances where committees do not exist, apprenticeship agreement is made between Apprentice and employer, or an employer group. The title, Apprentice, is often loosely used as a synonym for beginner, Helper, or Learner. This practice is technically incorrect and leads to confusion in determining what is meant. Typical classifications for Apprentices are Blacksmith Apprentice (forging); Machinist Apprentice (mach. shop); Plumber Apprentice (const.).

DOT 624.781-018 Assembly Repairman (agric. equip.)

Assembly mechanic.

Repairs assembly defects of agricultural equipment, such as tractors, hay balers, and combines, using handtools and power tools: Reads inspection reports and examines equipment to determine type and extent of defect. Alines, adjusts, or replaces parts, such as drive chains, sprockets, housings, and springs, using wrenches, hammer, pliers, and pneumatic grinder. Records type and cause of defect.

DOT 624.884-010 Greaser (agric.)

Lubricates and greases tractors and other powered farm machinery and attachments, fills gasoline tanks and radiators, changes and inflates tires, repairs tubes, couples attachments, such as cultivators and stalk cutter to tractors, and adjusts attachments to till soil at prescribed depth or to operate otherwise in an efficient manner.

O.E.
01.0302 Agricultural Structures and Conveniences

Learning activities designed to assist pupils in developing the ability to plan, select materials for, and construct and maintain agricultural structures and conveniences.

O.E.
01.0303 Soil Management

A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying and classifying soils; determining cropping systems and fertilizer; conditioning; and cultural practices that will result in efficient agricultural production.

O.E.
01.0304 **Water Management**

A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying, planning, laying out, constructing, using, and maintaining irrigation, drainage, water conservation, runoff, and erosion control systems, and with maintaining proper soil-water-plant relationships.

DOT 422.137-010 Irrigator, Head (agric.)

Ditch tender; foreman, irrigation.

Supervises and coordinates activities of workers engaged in irrigating crops: Inspects area irrigated to insure adequate soaking and prevent waste of water. Opens head gate to permit entry of water into main ditches. Signals worker to start water flow. Directs workers in cleaning and repairing ditches. Keeps workers' time records. May verify addition of liquid fertilizer to irrigation ditches by commercial firm. Performs other duties as described under Foreman (any ind.).

DOT 422.181-010 Zanjero (agric.)

Ditch tender.

Arranges schedules for irrigation of farms and orchards according to water rights or amount of company stock held, and controls water flow through pipeline system: Discusses water needs and progress of irrigation with customers. Schedules irrigation according to types of crops, urgency of need, and order of requests received. Patrols pipeline system carrying water from dammed rivers and manipulates controls to raise and lower pipeline gates to permit passage of water through system to farms and

orchards. During dry seasons, operates power-driven pumps to force water through system from wells. Cleans, lubricates, and makes minor repairs to pumps and gates. Inspects river dam for leaks and makes minor repairs or arranges for repairs and placement of dams that have been washed out. Keeps record of water consumed and prepares monthly statements for customers. Compiles reports for water company officials on condition of equipment, repairs to equipment and facilities needed, and other data.

DOT 422.884-010 Irrigator, Valve Pipe (agric.)

Floods or row-irrigates field sections, using portable pipe sections equipped with valves connected to underground waterline: Secures gate attachment (water flow regulator) to vertical pipe. Connects length of valve pipe to gate and attaches additional pipe through field section or across ends of rows until area is spanned. Starts motor that pumps water through pipeline system, and opens valves to direct water over uneven terrain and fill rows or areas enclosed by checks (catch embankments). Observes rate of flow and adjusts valves accordingly. Shovels dirt into holes and low spots in levees and removes obstructions. Digs opening in embankment at end of row to direct overflow of water into spillway. Builds levees to prevent water from overflowing other crops on highways. Lubricates pumping equipment and makes minor repairs.

DOT 422.887-014 Irrigator (agric.)

Irrigates field and row crops by controlling water from irrigation ditch to field by any of following methods: (1) Lifts gate inside of flooded irrigation ditch permitting water to flow

into bordered section of field. Shovels and packs dirt in low spots of embankment or cuts trenches in high areas to direct waterflow. Closes gate in ditch when bordered section is flooded. (2) Removes plugs from portholes in pipes or wooden tunnels set in embankment at end of rows and observes water flowing through them. Removes obstructions from rows and builds up edges of rows with dirt. Plugs porthole as each row is filled. (3) Siphons water from flooded irrigation ditch into furrows by using tube or hose. Removes siphon when water in furrows reach proper level. May be designated according to system of irrigation used as Irrigator, Border; Row Irrigator, Porthole; Row Irrigator, Siphon.

DOT 422.887-018 Irrigator, Sprinkling System (agric.)

Irrigator, overhead.

Irrigates crops, using portable sprinkler system: Lays out strings (pipe) along designated pipeline settings in field. Connects pipe, using wrench to tighten collar clamp. Attaches vertical pipes to revolving sprinkler heads at designated points along pipeline. Pumps water through system to irrigate crops. Observes revolving sprinklers to insure uniform distribution of water to all areas. Adjusts or replaces sprinkler heads, using handtools. Disassembles system and moves it to next location after specified time intervals.

DOT 422.887-022 Irrigator, Standpipe (agric.)

Attaches vertical pipes to underground pipeline system to irrigate crops: Connects standpipes (vertical pipes) to underground system, using handtools. Starts flow of water through

system. Shovels dirt around base of standpipe and builds dirt embankment around standpipe to form reservoir. Inserts lengths of pipe to connect reservoir to furrows.

O.E.
01.0305 Agricultural Mechanics Skills

Planned learning experiences designed to develop skills, abilities, and judgments necessary to select, use, and maintain hand and power tools, arc and acetylene welders, and to plan and establish home farm shops.

O.E.
01.0306 Agricultural Construction and Maintenance

A combination of subject matter and experiences designed to develop skills and abilities necessary in the planning, layout, fabrication, and maintenance of farm and other agricultural equipment, especially small, custom-built devices.

O.E.
01.0307 Agricultural Electrification

A combination of subject matter and experiences designed to provide opportunities for pupils to gain the knowledge and understanding necessary to make effective use of electricity and electrical equipment on farms, ranches, and other agricultural establishments. Included for study are the principles of electricity, maintenance and operation of equipment, and safety factors related thereto. (See also 16.010201 Agricultural Electrification Technology under Technical Education.)

O.E.
01.0399 Agricultural Mechanics, Other

Include here other organized subject matter and experiences emphasized in agricultural mechanics which are not listed above. (Specify.)

PART IV

AGRICULTURAL PRODUCTS (PROCESSING, INSPECTIONS, AND MARKETING) - OE 01.04 - 1

1. Food Products - OE 01.0401 - 3
2. Dairy Products - 01.040102 - 21
3. Non-Food Products - 01.0402 - 29
4. Agricultural Products, Other - 01.0499 - 31

INSTRUCTIONAL PROGRAM

O.E.
01.04 Agricultural Products (Processing, Inspection and Marketing)

A combination of subject matter and learning experiences designed to teach information, processes, scientific principles, and management decisions concerned with agricultural competencies in the food and non-food technology occupations. The groups of food products include (1) meat, fish, poultry, and eggs; (2) dairy products; (3) fruits and vegetables; (4) cereal grains; and (5) other foods and beverages. The non-food products include cotton, tobacco, and wool. Instruction may be provided in any or all groups of these products.

DOT 040.381-010 Laboratory Technician, Artificial Breeding (agric.)

Measures purity and potency of bull semen to develop improved methods for preserving and processing semen for artificial insemination of cattle: Observes sample of freshly collected bull semen under microscope to determine mobility of sperm cells. Determines density of semen, using densimeter. Adds measured amounts of extender, sodium citrate, and antibiotics to semen to dilute and preserve sample. Transfers semen to refrigeration unit. Records data for use in compiling history of sire bull semen. Cleans and sterilizes laboratory equipment. Performs experimental tests as directed, such as to extend survival rate and time for sperm cells and development of improved preservative processes. Cultivates, isolates, and identifies pathogenic bacteria and other microorganisms in semen.

DOT 168.287-014 Apiary Inspector (gov. ser.)

Bee inspector.

Inspects bee colonies for disease, pollinating strength, and compliance with government standards and regulations: Removes brood frames from hives and examines larvae to detect disease. Orders extermination and disposal of diseased colonies and destruction or sterilization of infected equipment. Prepares report slip for healthy colony and staples it to hive cover. Estimates number of bees in hive to determine pollinating strength and issues report to owner. Inspects buildings, processing equipment, and storage facilities for cleanliness. Gives instruction to growers on disease prevention and interprets applicable laws and regulations. Compiles and prepares activity reports.

O.E.
01.0401 Food Products

A combination of subject matter and learning experiences concerned with the scientific principles and operations involved in the preparation of agricultural products for sale and consumption, including home and institutional preparation of food and its nutritive value. (Included as 16.0203 Food Processing Technology under Technical Education.)

DOT 073.181-010 Veterinary Livestock Inspector (gov. ser.)

Inspects animals for presence of disease: Performs standard clinical tests and submits specimens of tissues and other parts for laboratory analysis. Reports existence of disease conditions to state and federal authorities. Advises livestock owners of economic aspects of disease eradication and advises consumers of public health implications of diseases transmissible from animals to humans. May institute and enforce quarantine or other regulations governing import, export, and interstate movement of livestock. Required to hold degree of Doctor of Veterinary Medicine.

DOT 073.281-010 Veterinary Virus-Serum Inspector (gov. ser.)

Inspects establishments where serums, toxins, and similar products used in treatment of animals, are manufactured, to enforce State or Federal standards of sanitation, purity, labeling, and storage. Examine animals used in production process to determine if diseases are present. Inspects production areas to determine that standards of sanitation are being maintained. Required to hold degree of Doctor of Veterinary Medicine.

DOT 162.158-054 Buyer, Livestock (ret. tr.; slaught. & meat pack; whole tr.)

Purchases livestock from yards and livestock raisers for company use or resale to packing houses or private individuals: Inspects, grades, and calculates weight of stock to determine value and yield. Purchases livestock according to authorization or prospect for resale. Contacts carriers to arrange for transportation of stock to slaughter houses, feed lots, or other destination. Sells stock to packing houses, private individuals, or other purchasers. [Salesman, Livestock (whole. tr.)]. May be employed by slaughter and meat packing company, commission house, or work as independent buyer. May be designated according to type of livestock purchased as Buyer, Cattle; Buyer, Hog; Buyer, Sheep.

DOT 162.158-082 Field-Contact Man (dairy prod.)

Field man; field technician.

Calls on dairy farmers to purchase dairy products and to discuss methods for improving milk production: Negotiates with farmers for long-term contracts to purchase milk of cream of specified butterfat content. Discusses milk production problems and tests milk for butterfat content, sediment, and bacteria. Suggests methods of feeding, housing, and milking to improve production and to comply with sanitary regulations. May set up truck routes to haul milk to dairy. May solicit memberships in cooperative association. May sell items, such as dairy farm equipment, chemicals, and feed.

DOT 162.158-026 Buyer, Agricultural Produce (whole tr.)

Produce buyer.

Purchases agricultural produce from growers for resale to wholesale or retail establishments. May be required to be licensed by State. May be designated according to type of agricultural produce purchased as Buyer, Potatoes.

DOT 162.158-062 Buyer, Maple Sirup (food prep., N.E.C.)

Purchases maple sirup from producers for processing into maple products. Tastes sirup and tests purity, using hydrometer. Observes product for clarity and color. Arranges packing and shipping details.

DOT 162.168-010 Buyer, Grain (grain & feed)

Grain buyer; grain-elevator agent; grain-elevator man; manager, grain elevator.

Manages grain elevator: Examines samples to determine extent of dirt, burs, hulls, seeds, and other dockage. Extracts samples and forwards them to local grain exchange for analysis and certification of moisture and protein content. Reviews analysis to ascertain amount of moisture and protein present in sample. Calculates market value and bargains with sellers to obtain grain at favorable price. Buys grain or issues storage certificates. Computes shipping cost to determine most economical way of transporting grain. Reviews and approves grain settlements to insure that payments are made according to weight, moisture, and protein content. Keeps daily records on kinds and grades of grain received, prices paid, amount purchased, and amount in storage.

Supervises workers engaged in dumping grain into pits, grinding and mixing feed to be sold, preparing freight cars for loading, and buying grain in field.

DOT 168.284-014 Veterinary Meat Inspector (gov. ser.)

Inspects establishments engaged in slaughtering livestock and processing meat intended for intrastate, interstate, and foreign shipment to enforce municipal, State, or Federal standards: Examines animal and carcass before and after slaughtering to detect evidence of disease or other abnormal conditions. Determines that ingredients used in processing and marketing meat and meat products do not violate standards of purity and grading, and that products are neither adulterated nor misbranded.

DOT 168.287-082 Poultry Grader (gov. ser.)

Agricultural commodity grader, poultry.

Certifies grade of dressed and ready-to-cook poultry in processing plants according to Federal standards: Examines poultry passing on conveyor, grades it for quality, and classifies it according to type, as roaster or fryer. Weighs poultry to ascertain accuracy of specified weight. Observes poultry preparation and inspects plant facilities to ascertain adherence to prescribed sanitary standards. Writes reports of findings and action taken. Must be licensed by U. S. Department of Agriculture. May inspect poultry in wholesale warehouse to determine compliance with government contract specifications for quality and classification.

DOT 168.287-086 Poultry Inspector, Lay (gov. ser.)

Examines poultry to certify wholesomeness and acceptability of condition of live, dressed, and ready-to-cook poultry in processing plant, according to Federal standards: Inspects live birds to detect disease and indication of substandard quality. Observes dressed birds and viscera passing on conveyor for such indications of disease as spots and abnormal growths. Removes birds not meeting prescribed standards. Inspects plant facilities to ascertain if prescribed sanitary standards are maintained. Writes reports of findings and action taken. Must be licensed by U. S. Department of Agriculture and be supervised by Veterinary Meat-Inspector.

DOT 185.168-034 Manager, Food Processing Plant (can. & preserv.)

Manages food processing plant: Contacts Field Man (any ind.) to arrange for harvesting and delivery of food products to plant for processing. Supervises, through subordinates, workers engaged in processing, canning, freezing, storing, and shipping fruits and vegetables. Oversees or directs dismantling, moving, installing, and repairing of equipment and machines. Approves payrolls and payment for produce. Estimates quantities needed and orders supplies and equipment. May hire, transfer, and discharge employees. May provide transportation to expedite delivery of produce during peak season. May arrange for freezing of packaged produce by other plants. May determine price to be paid to growers.

DOT 403.687-010 Carrot Grader-Inspector (agric.)

Carrot checker.

Examines bunched carrots to detect malformed, blemished, or

damaged carrots and to determine that dead fronds have been removed and bunches are properly tied. Estimates weight of bunches by feel. Rejects substandard bunches and throws acceptable bunches on pile for loading.

DOT 404.687-010 Watermelon Inspector (agric.)

Inspects watermelons for weight and uniformity of size before shipping. May cut plug from melon to determine quality and degree of ripeness.

DOT 412.137-010 Egg-Room Foreman (agric.)

Supervises and coordinates activities of hatchery workers engaged in candling, sorting, and traying eggs prior to incubation: Records number of eggs received from suppliers. Directs workers in candling and sorting eggs according to size, shape, shell thickness, enlarged air cells, and other criteria affecting hatched chicks. Performs other duties as described under Foreman (any ind.). (Foreman defined on previous page.)

DOT 412.168-010 Manager, Hatchery (agric.)

Poultry technician.

Plans, directs, and coordinates operation of commercial poultry hatchery: Arranges with farmers for supply of eggs to hatchery, and arranges with purchasing agents to sell hatched chicks. Advises flock owners on feeding, artificial illumination for laying and breeding stock, brooding chicks, sanitary measures, marketing culled poultry, and preventing and treating diseases. Interprets breeding, egg hatch ability, and other records or reports to flock owners. Plans sales and advertising programs.

Arranges for sales equipment and supplies, such as feeds, medicine, and brooders. Contacts farmers and commercial growing establishments to obtain number and variety of chicks desired in order to schedule hatching. Determines territory to be served by hatchery, varieties of chicks to be hatched, and selling price. May manage custom hatchery to hatch poultry eggs for flock owners and be designated Hatchery Man, Poultry.

DOT 413.684-010 Brand Inspector (gov. ser.)

Inspects cattle, horses, and mules being sold or shipped outside of inspection area to insure that they carry owner's brand: Ropes and ties animal. Clips hair on animal, using hand clippers, to make brand visible. Verifies brand in registry. Prepares periodic reports listing number of animals inspected, brands, and destination. May investigate origin of animal when ownership is questionable or in cases of suspected theft. May give testimony in legal cases.

DOT 466.887-010 Livestock Caretaker, Yard-Or-In-Transit (any ind.) Livestock handler.

Performs any combination of following tasks to bed, feed, water, load and unload, weigh, mark, and segregate livestock awaiting slaughter in ranch, sales, or slaughter yards or in transit: Drives livestock into pens, killing or loading chutes, trucks, or railroad cars. Weighs animals separately or in truck lots and segregates them according to weight, age, color, and physical condition. Tags, paints, or tattoos identifying marks on livestock to signify ownership or grade of animal. Records

weights and grades for each animal processed. Scatters bedding material, such as sawdust or straw, in pens and maintains supply of water in watering tanks. Feeds livestock hay, grain, or other prepared feed as required. Cleans pens, using hose, fork, shovel, or rake. May apply liniment or other remedies to livestock when illness or injury is detected. May be known according to task performed as Animal Weigher; Live-Car Caretaker; Livestock Feeder; Livestock Penner (slaught. & meat packing); Stock Driver; Yard-and-Sort Man.

DOT 520.381-010 Honey Grader-and-Blender (food prep., n.e.c.) Honey liquefier.

Grades honey according to type, color, bouquet, and moisture content, and blends various grades to obtain uniform product: Compares samples of liquid honey lots with standard samples for color and bouquet, and ascertains moisture content using refractometer. Calculates amounts of various types of honey for mixing to produce product of uniform color, clarity, and bouquet. Directs other workers in dumping and blending of various honey lots in warming chamber. May grade and mark honeycomb sections according to Government regulations.

DOT 521.138-010 Rice Miller (grain & feed)

Supervises and coordinates activities of workers engaged in milling rice: Reviews instructions covering grade and amount of rice to be milled, and plans operations accordingly. Issues instructions for adjusting shelling-stones, rice hullers, rice-cleaning machine, rice grader, rice polishing equipment, reel,

scalping machine, and other milling machinery. Observes milling process and examines rice and issues instructions for readjustment of machinery to maintain quality and quantity of product. Inspects and repairs machinery. May plan installation of machinery.

DOT 521.885-122 Egg-Breaking-Machine Operator (slaught. & meat pack.)

Tends machine that breaks eggs and separates yolk from white of egg: Starts machine that automatically breaks eggs and dumps contents into individual cups. Observes eggs for specified yolk color or signs of rottenness before cups enter separator. Trips cup lever to drop dark yolk into bucket as egg white passes into separator or stops machine and removes cup containing rotten egg.

DOT 521.885-134 Feed Grinder (grain & feed)

Tends machines that grind, cut, crimp, shell, or roll grain, hay, corncobs, chaff, and screenings for stock and poultry feed: Opens chute to regulate flow of grain into machine or pitches hay and corncobs into machine hopper. Starts machine and adjusts control to regulate speed according to fineness of grind specified. May tend separator that cleans grain prior to grinding or to sift ground grain. May start conveyors and elevators to transfer processed feed to storage or packing machine bins. May fill sacks and weigh on platform scale. May be designated according to machine tended as Corn-Cutter Operator; Corn-Sheller Operator; Crimper Operator; Crusher-Machine Operator; Hammer-Mill Operator; Rolled-Oats-Mill Operator.

DOT 521.885-170 Grader Man (agric.)

Tends machines that clean and grade seed corn: Starts

machines and opens chute gate to permit corn to flow through series of vibrating screens as fans blow dust, chaff, cobs, shucks, and other foreign material from corn. Adjusts chute slides to regulate flow of corn to reciprocating screens and revolving cylinders that separate corn kernels according to width, thickness, and length. Examines graded kernels for uniformity, using test screen. Replaces defective screens and cylinders.

DOT 521.885-186 Grinder Operator (cereal)

Tends grinding mills that process baked or dried bulk cereal products prior to packaging: Starts grinder and opens chute gate on hopper to direct bulk cereal between grinding rolls. Sifts handful of grounded and graded cereal through set of screens to determine whether cereal has been ground to specified size. Moves levers to adjust roll clearance in grinder to produce cereal comparable with that of screened sample. Cleans and replaces clogged or worn screens.

DOT 522.782-042 Smoker (slaught. & meat pack.)

Meat smoker; smokehouse attendant; smokehouse man.

Controls battery of smoke chambers in which meats, such as bacon, hams, meat loaf, sausage, shoulders, and weiners, are cooked and cured: Loads racks and cages, suspended from overhead conveyor, with meat products and filled molds, and pushes racks into smokehouse for cooking and curing. Shovels sawdust into hopper of smoker and lights burner to ignite sawdust. Starts electric blower to admit air and blow smoke into curing chambers. Observes gages, turns steam valves, and adjusts ventilators and

dampers to regulate temperature, humidity, and density of smoke to control cooking and curing process. Inspects meat for color, feels it for firmness, and inserts thermometer into meat to ascertain progress of cooking and curing. Opens water valve to spray and chill meat. Removes cooked and cured meat and empties molds. Places meat loaves on racks and returns them to smokehouse for further smoking and drying. Pushes racks of cured meat to chill room. May stuff meat loaves into plastic casings, using horn (funnel-shaped tube). May record weight and amount of meat cured. May steam-clean smoke chambers and heating coils, and remove ash.

DOT 522.884-010 Neutralizer Man (corn prod.)

Neutralizes acid in glucose (converted starch) by adding specified amount of soda ash: Weighs prescribed amount of soda ash on scales, dissolves it in water, and pours solution into neutralizing tank. Pours measured amount of filtracell into tank. Obtains sample from tank, and holds it up to light to detect formation of precipitate. Adds soda ash if precipitate is not readily forming. Adds acid to tank to begin hydrolysis of starch into glucose.

DOT 522.884-014 Pickler (can. & preserv.)

Pickle maker; pickleman; pickle processor.

Pickles prepared food products in preservative or flavoring solutions: Mixes ingredients, such as salt, vinegar, or sugar, in barrels, vats, or tanks, according to formula, to make pickling or flavoring brine. Dumps product, such as vegetables, fruit, fish, or meat, into solution to soak for specified time. May

pack product into barrels in layers, covering each layer with preservative compound. May remove contents from containers by hand or with dip net. May be designated according to product pickled as Fish Pickler; Gherkin Pickler; Pepper Pickler; Sweet-Pickled Fruit Maker; Sweet-Pickle Maker.

DOT 522.885-062 Honey Processor (food prep., n.e.c.)

Filterman; pasteurizer.

Tends equipment that pasteurizes and filters liquid honey, and seeds it with crystals to make crystallized honey for use as a food spread: Turns valve to admit honey from blending tanks to pasteurizer, and to adjust and control pasteurizing temperature. Installs pads in filter press by hand and turns handcrank to tighten them. Starts pumps and adjusts pressure to force honey through filter and transfer it to bottling machine or cooling vats. Pours container of honey crystals into vat of liquid honey and mixes it with paddle of electric stirring rod to induce controlled crystallization. May bottle honey.

DOT 523.137-010 Preparation Foreman (can. & preserv.)

Supervises and coordinates activities of workers engaged in receiving, sorting, preparing, and processing fruits, vegetables, and fish for canning or freezing. Performs duties as described under Foreman (any ind.) (defined on previous page). May be designated according to type of preserving process as Preparation Foreman, Canning; Preparation Foreman, Freezing.

DOT 523.782-050 Maple-Sirup Maker (food prep., n.e.c.)

Controls equipment to produce maple sirup: Transfers maple sap to eveporator pan placed on stove, allowing product to flow through various compartments of evaporator. Pours additional sap

into evaporator as needed to maintain uniform temperature. Transfers sirup to heated finishing pan when level of product in evaporator indicates evaporation is complete. Tests sirup for prescribed consistency by adding quantity of sirup to cold water and observing appearance. Filters evaporated sirup through cloths or other filtration media. Pours sirup into containers or molds for storage, use, or sale. May boil, stir, and evaporate sirup to form variety of maple products, such as maple sugar, wax, butter, or candy, depending on processing temperature and time, and may be designated Maple-Products Maker.

DOT 523.885-070 Dehydrator Man (can. & preserv.)

Tends sulfur and drying chambers to bleach and dehydrate fruit: Starts conveyors to load trays with fruit, and levels fruit in trays to insure thorough processing. Pushes loaded cart into sulfurizing chamber and lights burner to generate fumes. Moves cart from sulfurizing chamber into drying chamber to dehydrate fruit. Observes gages, and regulates and maintains specified temperature and humidity in drying chambers. Feels and observes fruit during dehydrating process to ascertain firmness and color in accordance with standards. Pulls cart from heating chamber. May record drying time of each load.

DOT 525.381-010 Butcher, All-Round (slaught. & meat pack.)

Performs all slaughtering and butchering operations in a slaughtering and meat packing establishment, using such cutting tools as cleaver, knife, and saw: Stuns animal prior to slaughtering [Stunner, Animal]. Shackles hind legs of animals, such as

cattle, sheep, and hogs, to raise them for slaughtering or skinning [Shackler]. Severs jugular vein of animals to drain blood and facilitate slaughtering [Sticker, Animal]. Trims head meat and otherwise severs or removes parts of animal heads or skulls [Head Trimmer]. Saws, splits, or scribes slaughtered animals to reduce carcass [Carcass, Splitter]. Slits open, eviscerates, and trims out carcasses of slaughtered animals. Cuts out, trims, skins, sorts, and washes viscera of slaughtered animals to separate edible portions from offal [Offal Man]. Washes carcasses [Washer, Carcass]. Wraps muslin cloth about dressed animal carcasses or sides to enhance appearance and protect meat [Shrouder]. Shaves hog carcasses [Shaver]. Trims and cleans animal hides, using knife [Hide Trimmer (grease & tallow; slaught. & meat pack.)]. Cuts bones from standard cuts of meat, such as chucks, hams, loins, plates, rounds, and shanks, to prepare them for marketing [Boner, Meat]. Examines, weighs, and sorts fresh pork cuts [Grader, Green Meat]. Skins sections of animals or whole animals, such as cattle, sheep, and hogs [Skinner]. Works in small slaughtering and meat packing establishment. May prepare meats for smoking [Smoked Meat Preparer]. May cut and wrap meat. May trim, clean, and salt hides [Hide Trimmer (grease & tallow; slaught. & meat pack.)].

DOT 525.887 Stunner, Animal (slaught. & meat pack.)
Knocker.

Stuns animals preparatory to slaughtering: Opens gate to allow cattle to enter knocking pen or chute. Moves levers to close squeezing mechanism and immobilize animal. Stuns animal by striking it on forehead with sledge or pneumatic hammer,

shooting it in head, or by placing electric shocking device on head of animal. Pulls lever to tilt floor of pen and slide animal onto killing floor or onto conveyors leading to sticking and shackling tables. May stick and shackle animals [Sticker, Animal; Shackler]. May assist in driving animals into knocking pen or chute.

DOT 525.887 Shackler (slaught. & meat pack.)

Hanger.

Chains hind legs of stunned animals, such as cattle, sheep, and hogs, to revolving-wheel of hoist that raises animal onto rail conveyor, or hoists animal off floor, for sticking or skinning. May place trolley hooks in leg tendon of cattle to raise them. May lower beef carcass onto stationary rail for skinning.

DOT 525.884 Sticker, Animal (slaught. & meat pack.)

Animal sticker.

Severs jugular vein of previously stunned animals with knife to prepare them for butchering: Positions neck of animal suspended from overhead rail or shackled on table. Thrusts knife into throat of animal and twists blade to locate and sever jugular vein. May shackle and suspend animal before sticking [Shackler]. May sever head and remove skin with knife, after blood has drained. May be designated according to animal killed as Calf Sticker; Cattle Sticker; Hog Sticker; Sheep Sticker.

DOT 525.884 Head Trimmer (slaught. & meat pack.)

Benchman, head; head boner; templer, head; trimmer, head.

Removes meat, glands, and organs from carcass heads for use

in making meat products or processing for medicinal use of by-products, performing any combination of the following tasks: Places head on table or in holding hooks and trims skin and meat from jaw, jowls, and skull with knife. Cuts fat from lean meat and drops it into containers. Inserts knife into mouth cavity to cut and remove tongue. Trims fat, ragged edges, veins, and bruises from tongue. Cuts and pulls hog snout from head, using knife and snout-pulling machine. Pulls jaw from skull, using jaw pulling machine, bar, or chisel. Places skull on block and splits it with automatic splitter or cleaver. Removes brains, pituitary gland, and other parts, and places them in separate trays. Removes horns from head, using shears. May be known according to specific task performed as Brain Picker; Chiseler, Head; Jawbone Breaker; Jowl Trimmer; Snout Puller; Splitter, Head; Temple-Meat Cutter; Tongue Cutter.

DOT 525.884 Carcass, Splitter

DOT 521.884 Offal Man

DOT 525.887 Washer, Carcass

DOT 525.887 Shrouder

DOT 525.887 Shaver

DOT 525.887 Hide Trimmer (grease & tallow; slaught. & meat pack.)

DOT 525.884 Boner, Meat

DOT 525.884 Skinner

DOT 525.887 Smoked Meat Preparer

DOT 525.387-010 Grader, Meat (slaught. & meat pack.)

Examines animal carcasses to grade them in terms of sales

value: Walks between rows of suspended carcasses and examines them to determine grade based on age, sex, build, shape, thickness of meat, quantity and distribution of fat, color, texture, and marbling of lean meat. Attaches tag identifying grade of carcass. May be designated according to carcass graded as Beef Grader; Hog Grader; Sheep or Calf Grader.

DOT 529.138-030 Supervisor, Specialty Food Products (slaught. & meat pack.)

Supervises and coordinates activities of workers engaged in mixing, cooking, molding, and packaging specialty food products, such as frankfurters, salami, sausage, and chili: Reads production schedule to determine work procedures, supplies to be requisitioned, personnel requirements, and processing equipment to be used. Assigns workers to work stations and issues instructions concerning formulas to follow and work procedures. Coordinates flow of work between work stations. Keeps production and timecard records.

DOT 529.387-022 Fruit-Buying Grader (can. & preserv.)
Fruit inspector; platform inspector.

Examines, sorts, and grades sample fruit from load at receiving point: Takes random samples from load, weighs sample and containers, and calculates net weight and tare of total load. Sorts sample fruit by grade and size, according to company or government specifications. Weighs each portion of sample and calculates percentage of each size and grade in total load. Issues grade ticket or receipt for load. May test fruit for maturity, using pressure gun to break flesh of fruit, or hand rings to size it.

DOT 529.687-018 Egg Candler (any ind.)

Inspects eggs to ascertain quality and fitness for consumption or incubation, according to prescribed standards: Observes eggs as they are carried over light by conveyor, holds eggs before shielded light, or rolls them over lighted glass plate to render egg translucent. Observes shell color and texture and internal characteristics, such as streaks, shadings, discolorations, size and position of yolk, and size of air cell. Places spoiled and substandard eggs in cases. Packs salable eggs in cartons or releases them on conveyor belt for packing by other workers. May break substandard eggs in container for further processing. May grade eggs according to size, shape, color, and weight and be designated as Egg Grader.

DOT 529.687-054 Sorter, Agricultural Produce (agric.; can. & preserv.; whole. tr.)

Sorter, food products.

Sorts agricultural produce, such as bulbs, fruits, nuts, and vegetables, working as crew member: Segregates produce on conveyor belt or table, according to grade, color, and size, and places produce in containers or on designated conveyors. Discards cull (inferior or defective) items and foreign matter. Bunches, ties, and trims produce, such as asparagus, carrots, celery, and radishes. Picks out choice produce to be used as cappers (top layers on marketing containers). Packs produce in boxes, barrels, baskets, or crates for storage or shipment [Packer, Agricultural Produce]. May be designated according to work performed as Apple Sorter; Asparagus Grader and Buncher (agric.); Capper Picker (agric.;

whole. tr.); Citrus-Fruit-Packing Grader (agric.; whole. tr.); Cull Grader (agric.; whole. tr.); Potato Grader (agric.; whole. tr.)

O.E.
01.040102 Dairy Products

A combination of subject matter and practical experiences concerned with information, processes, science, and decisions associated with milk and products derived from milk, e.g., cream, ice cream,butter, and cheese.

DOT 222.687 Milk Receiver (dairy prod.)

Intake operator; weigher and sampler.

Performs any combination of following tasks in receiving department of dairy: Turns valves of can washing cabinet to clean cans Container Washer, Machine (any ind.) and starts conveyor to transfer cans to intake room. Taps can covers loose with mallet, and places covers on conveyor rack. Observes, smells, and tastes liquid to detect sourness and draws sample with dipper. Tests sample for acidity, butterfat content, and sediment, using testing apparatus. Dumps liquid into weigh vat and slides empty cans into conveyor Dairy Helper . Records weight of milk by placing ticket in automatic meter of weigh-vat scale. Slides filled cans onto platform scale to weigh milk.

Milk-Receiver, Tank Truck (dairy prod.)

Pumps milk from tank truck to storage tank: Connects plastic hose between sanitary valves of truck and tank, starts pump, and turns valves to transfer milk to tank. Records amount of milk pumped by weighing truck before and after pumping or by observing

automatic flowmeter reading. Tests milk sample for acidity and butterfat content, using testing apparatus. Cleans and sterilizes tanks and equipment. May add skim milk or cream to milk to obtain specified butterfat content.

DOT 379.887 Milk Sampler (gov. ser.)

Assistant-milk sanitarian; sampler.

Collects milk samples from farms, dairy plants, and tank cars and trucks for laboratory analysis: Removes sample from bulk tanks or tankers, using dipper or pipette, and pours it into sterile bottles. Labels bottle with origin of sample, packs it in dry ice, and ships it to laboratory for bacteriological and butterfat content analysis.

DOT 469.381 Dairy Tester (agric.)

Tests milk to determine bacterial count, percentage of butterfat, and amount of acid in milk of each cow in herd, traveling from farm to farm: Determines bacterial count in sample of milk by adding measured amount of methylene blue and observing time required for blue color to disappear. Separates butterfat from milk, using centrifuge, and determines percent by volume, using graduated cylinder. Measures amount of acid in milk, using pH indicator.

DOT 522.782 Cottage-Cheese Maker (dairy prod.)

Cottage-cheese man.

Controls equipment to make cottage cheese from milk: Washes cheese vat and tools with sterilizing solution and rinse water. Turns valves and observes meters to convey specified amounts of milk and culture into vat. May add rennet to coagulate milk, and

dye to tint curd. Turns steam and water valves and observes thermometer and clock to heat milk for specified time and at specified temperature to incubate culture. Starts agitator in vat and stirs ingredients, using paddle. Tests sample of whey for acidity and cuts curd with knife to allow seepage of whey. Observes thermometer and adjusts steam and water valves to cook curd at slowly increasing temperature. Feels and breaks sample of curd to determine when it is sufficiently cooked. Turns cold water and drain valves to wash curd and remove whey. When making baker's cheese, drains uncooked whole curd from vat into porous bags to remove whey and dumps curd into blending machine to distribute residual moisture. When making creamed cottage cheese, adds cream and stirs with paddle or starts agitator. Records processing steps. May taste cheese for salt and acid content. May pasteurize milk. May make culture.

DOT 523.885 Batch Freezer (dairy prod.)

Tends batch freezer that freezes liquid ice cream mix to semi-solid consistency: Measures specified amounts of ice cream mix, color, and flavor, using graduate, and dumps ingredients into freezer barrel. Starts beaters and refrigerating unit. Observes clock and ammeter for specified reading denoting end of freezing cycle and turns valve to start flow of frozen mix into containers. Places fixture which ripples ice cream into valve outlet, and stirs sirups into ice cream with spoon or adds candies, fruit, and nuts to make various varieties of ice cream. Places containers of mix in hardening cabinet. Washes and sterilizes equipment, using cleansing solution, brushes, and hot water.

DOT 529.381 Cheesemaker (dairy prod.)

Cheese cooker.

Cooks milk and specified ingredients to make cheese according to formula: Pasteurizes and separates milk to obtain prescribed butterfat content. Turns valves to fill vat with milk and heat milk to specified temperature. Dumps measured amounts of dye and starter into milk. Starts agitator to mix ingredients. Tests sample of milk for acidity and allows agitator to mix ingredients until specified level of acidity is reached. Dumps and mixes measured amount of rennet into milk. Stops agitator to allow milk to coagulate into curd. Pulls curd knives through curd or separates curd with hand scoop to release whey. Observes thermometer, adjusts steam valve, and starts agitator to stir and cook curd at prescribed temperature for specified time. Squeezes and stretches sample of curd with fingers and extends cooking time to achieve desired firmness or texture. Gives directions to Cheesemaker Helper or other workers to make curd, drain whey from curd, add ingredients, such as seasonings or mold, pack, cut, pile, mill, dump, and press curd into specified shapes. Directs other workers who immerse cheese in brine or roll cheese in dry salt, pierce or smear cheese with cultured wash to develop mold growth, and place or turn cheese blocks on shelves to cure cheese. Tastes, smells, feels, and observes sample plug of cheese for quality. Records amounts of ingredients used, test results, and time cycles. Makes variations in time cycles and ingredients used for succeeding batches. Dumps specified culture into milk or whey in pasteurizer to make bulk starter. May be required to hold state cheesemaker's license.

DOT 529.782 Cheesemaker Helper (dairy prod.)

DOT 529.387 Grader (dairy prod.)

Evaluates body, texture, flavor, and color of natural cheese to grade it: Pushes trier into cheese to obtain sample plug. Smells and tastes cheese for odor, acidity, and flavor. Examines cheese with fingers to determine firmness and texture. Observes cheese for color, shape, size, finish, and surface blemishes. Records weight, grade, and identifying data. Must hold State or Federal license. May buy cheese and assist with production problems.

DOT 529.782 Buttermaker (dairy prod.)

Controls equipment to make grades of butter by either of the following methods: (1) Butter churn method: Connects sanitary pipe between cream storage vat and churn. Starts pump to convey sterile solution through equipment and to admit measured amount of pasteurized cream into churn, and starts churn. Observes separation of buttermilk from butter and pumps buttermilk from churn. Opens churn and sprays butter with chlorinated water to remove residue buttermilk. Compares butter with color chart and adds coloring to meet specifications. Tests butter for moisture, salt content, and consistency, using testing apparatus, and achieves specified consistency by adding or removing water. Examines, smells, and tastes butter to grade it according to prescribed standard. (2) Butter chilling method: Pasteurizes and separates cream to obtain butter oil and tests butter oil in standardizing vat for butter fat, moisture, salt content, and acidity, using testing

apparatus. Adds water, alkali, and coloring to butter oil to achieve specified grade and starts agitator to mix ingredients. Turns valves and observes gages to regulate temperature and flow of water, regrigerant, and butter oil through chilling vat. Smells, tastes, and feels sample to grade butter emerging from chilling vat. May be designated according to equipment operated as Butter-Chilling Equipment Operator; Butter Churner.

DOT 529.782 Cheesemaker Helper (dairy prod.)

Performs the following tasks to assist Cheesemaker in making cheese: Separates and pasteurizes milk, using dairy processing equipment. Starts pump, turns valves, and observes gages to fill cheese vats with specified amount of milk and maintain specified temperature in vats. Dumps dye and starter into milk. Starts agitator to mix ingredients. Dumps rennet into vat to coagulate milk into curd. Dumps, presses, and salts curd. Pierces, washes, and turns cheese blocks to cure cheese. Operates washing machine and extractor to clean and dry cloths. Performs other duties as described under Helper (any ind.).

DOT 529.782 Dairy-Processing-Equipment Operator (dairy prod.)

Sets up and operates continuous flow or vat-type equipment to process milk, cream, and other dairy products, following specified methods and formulas: Connects pipes between vats and processing equipment. Assembles fittings, valves, bowls, plates, disks, impeller shaft, and other parts to equipment with wrench to prepare for operation. Turns valves to pump sterilizing solution and rinse water through pipes and equipment and spray vats

with atomizer. Starts pumps and equipment, observes temperature and pressure gages, and opens valves on continuous flow equipment to force milk through centrifuge to separate cream from milk through homogenizer to produce specified emulsion, and through filter to remove sediment. Turns valves to admit steam and water into pipes to pasteurize milk and to circulate refrigerant through coils to cool milk. Starts pump and agitator, observes pressure and temperature gages, and opens valves on vat equipment to fill, stir, and steam-heat milk in vat. Pumps or pours specified amounts of liquid or powder ingredients, such as skim milk, lactic culture, stabilizer, neutralizer, and vitamins into vat to make dairy products, such as buttermilk, chocolate milk, or ice cream mix. Tests product for acidity at various stages of processing. Records specified time, temperature, pressure, and volume readings. May be designated according to process performed as Byproducts Man; Clarifier Operator; Cooler Man II; Homogenizer Operator; Mix Man; Pasteurizer Operator; Separator Operator. May be required to hold license from State board of health or local government unit.

DOT 529.782 Freezer Man (dairy prod.)

Freezer; freezer operator; ice cream freezer.

Operates one or more continuous freezers and other equipment to freeze ice cream mix into semi-solid consistency: Weighs or measures powder and liquid ingredients, such as color, flavoring, or fruit puree, using graduate and dumps ingredients into flavor vat. Starts agitator to blend contents. Starts pumps and turns valves to force mix into freezer barrels, admit refrigerant into freezer coils, and inject air into mix. Starts beater, scraper,

and expeller blades to mix contents with air and prevent adherence of mixture to barrel walls. Observes ammeter and pressure gage and adjusts controls to obtain specified freezing temperature, air pressure, and machine speed. Fills hopper of fruit feeder with candy bits, fruit, and nuts, using scoop, or pours sirups into holder of rippling pump. Sets controls according to freezer speed to feed or ripple ingredients evenly into ice cream expelled from freezer. Opens valve to transfer contents to filling machine that pumps ice cream into cartons, cups and cones or molds for pies, rolls, and tarts. Places novelty dies in filler head that separates flavors and forms center designs or rosettes in packaged product. Weighs package and adjusts freezer air valve or switch on filler head to obtain specified amount of product in each container. Assembles pipes, fittings, and equipment for operation, using wrench. Sprays equipment with sterilizing solution.

DOT 529.886 Dairy Helper (dairy prod.)

Performs any combination of following tasks in dairy: Scrubs bottles, pipes, fittings, and machines with chemical solution, using brush. Attaches pipes and fittings to machines, using wrenches. Examines canned milk for dirt and odor, and dumps milk into receiving tank. Dumps milk, cream, butter, cottage cheese, and powdered milk into machine hoppers. Starts and stops machines and equipment. Cuts butter and cottage cheese, using knives. Wraps butter prints in foil or parchment and seals them with hot iron. Packs bulk butter into cartons. Pulls lever on hopper to fill cartons or bags with powdered milk. Weighs containers on scale. Places bottles, cartons, and packages into container, and

moves to storage, using handtruck. Dumps empty bottles, cases, and cans onto conveyor for transfer to receiving, washing, or filling stations. May be designated according to product handled as Buttermaker Helper; or stage of treatment as Pasteurizer Helper.

O.E.
01.0402 Nonfood Products

A combination of subject matter and experiences concerned with the information, scientific principles, processes and marketing functions associated with nonfood products such as cotton, tobacco, and wool, as well as the industrial nonfood uses of grains and oilseeds.

DOT 162.168-014 Buyer, Tobacco (whole. tr.)

Tobacco buyer.

Buys tobacco for tobacco-processing companies at warehouse auctions: Follows Auctioneer (ret. tr.; whole. tr.) (DOT 294.258) along rows of tobacco-filled baskets. Examines color and texture of leaf and determines bid according to quality of tobacco, quantity of each grade to be purchased, and average price authorized. Indicates bid by word, mannerism, hand, or other characteristic signal. Gives directions to workers engaged in removing tobacco purchased from warehouse floor in one-buyer markets; in larger market, proceeds to next scheduled sale. May inspect growing tobacco crops and estimate quality and quantity of tobacco that will be produced in each area.

DOT 261.358-010 Salesman, Raw Wool (whole. tr.)

Sells raw wool to spinning mills, performing duties as described under Salesman (ret. tr.; whole. tr.)

DOT 413.687-010 Wool-Fleece Grader (agric.)

Fleece grader.

Examines and sorts wool fleece according to quality: Lifts unprocessed fleece to estimate approximate weight of fleece after processing. Separates locks of fleece and examines fibers for length diameter, elasticity, and color to determine quality of fleece. Examines fleece and separates locks to determine presence of dirt, manure, straw, stains, and moisture. Separates and places fleece in containers and marks wool grade on container according to government standards for quality.

DOT 469.387-010 Cotton Classer (agric.; textile)

Agricultural-commodity grader, cotton; cotton grader.

Classifies cotton according to grade, staple length, and character, employing knowledge of cotton fiber and standards for various grades as established by U. S. Department of Agriculture: Examines cotton sample to detect variations in color; foreign matter, such as pieces of bolls, leaves, or twigs, undeveloped seeds, sand, and dust; and preparation defects, such as gin-cut fibers and neps. Pulls layer of fibers from cotton sample with fingers to form rectangular tuft, places tuft on black background, and estimates or measures staple length, using cotton-stapling rule. Determines character (strength, uniformity, and cohesive quality) of fibers by pulling sample tuft apart between fingers, observing effort expended in breaking sample, fineness of fibers, and drag as fibers cling to each other. Classifies fibers according to standards for various grades. May examine fibers through microscope to determine maturity and spirality of fibers. Records

grade on bale identification tag and bale number and grade on shipping, receiving, or sales sheet.

DOT 523.782-062 Tobacco Curer (agric.)

Controls heating equipment in tobacco barns to cure tobacco: Starts coal or wood fire in furnace, lights oil or gas burner, or turns on electric furnace to heat barn. Regulates temperature and draft controls, depending on type of tobacco and weather conditions, until leaves are yellowed. Observes color and moisture content of leaves to determine when to increase heat and regulate draft controls to dry leaves and stems. When bulk curing barns (tobacco leaves packed in metal racks and cured by forced air heat) are used, starts and regulates fan speed to control movement of air and heat through tobacco leaves.

O.E.
01.0499 Agricultural Products, Other

Include here other organized subject matter and practical experiences emphasized in agricultural products processing, inspection, and marketing which are not classifiable or listed above. (Specify)

PART V

ORNAMENTAL HORTICULTURE (PRODUCTION, PROCESSING, MARKETING, AND SERVICES) - OE 01.05 - 1

1. Arboriculture - 01.0501 - 2
2. Floriculture - 01.0502 - 3
3. Green House Operation & Management - 01.0503 - 4
4. Landscaping - 01.0504 - 4

INSTRUCTIONAL PROGRAM

O.E.
01.05 Ornamental Horticulture (Production, Processing, Marketing, and Services)

Organized subject matter and practical experiences concerned with the culture of plants used principally for ornamental or esthetic purposes. Instruction emphasized knowledge and understanding important to establishing, maintaining, and managing ornamental horticulture enterprises.

O.E.
01.0501 Arboriculture

Organized subject matter and practical experiences concerned with the principles and practices invclved in the culture and maintenance of woody plants used for decoration and shade purpose.

DOT 407.138-014 Tree-Trimming Foreman (light, heat, & power; tel. & tel.)

Supervises and coordinates activities of workers engaged in clearing right-of-ways for high-voltage electric powerlines: Determines trees and treetops to be pruned, felled, or repaired by trimming crews. May consult with property owners to obtain consent to trim trees. May settle claims for damage to property incurred during tree-trimming operations. Performs other duties as described under Foreman (any ind.)

DOT 409.181-014 Tree Surgeon (agric.)

Tree doctor; tree skinner.

Prunes and treats ornamental and shade trees and shrubs in yards and parks to improve their appearance, health, and value: Cuts out dead and undesirable limbs and trims trees to enhance beauty and growth. Scrapes decayed matter from cavities in trees, and fills holes with cement to promote healing and prevent further deterioration. Sprays and dusts pesticides on shrubs and trees to control pests and disease or sprays foliar fertilizers to increase plant growth, using hand or machine dusters and sprayers. Tops trees to control growth characteristics and to prevent interference with utility wires. May apply herbicides to kill brush and weeds. May fell and remove trees and bushes. May plant trees and shrubs.

DOT 409.884-014 Tree-Surgeon Helper (agric.)

Prunes, sprays, fertilizes, and cuts down trees as directed by Tree Surgeon (profess. & kin.) (DOT 409.161): Cuts or saws off dead, diseased, or otherwise undesirable limbs from tree, using shears and pruning saw. Sprays tree with insectitude. Punches holes in ground around tree, using hollow pipe, or digs around tree with shovel and pours liquid chemical fertilizer into holes. Cuts down trees, using handsaw or powersaw.

O.E.
01.0502 Floriculture

Organized subject matter and practical experiences which are concerned with principles and practices involved in field or greenhouse production of flowers and the arrangement of such flowers for ornamental purposes.

DOT 406.181-010 Flower Grower (agric.)

Grows shrubs, rootstocks, cut flowers or flowering bulbs: Plans acreages to be planted according to demand for species and variety and availability of seed, bulbs, or scion stock. Operates farm machinery to till soil, distribute fertilizers, and sow, cultivate, and harvest crops [Farm-Equipment Operator (agric.) DOT 409.883]. Buds or grafts scions on seedling stock. Directs work routine of seasonal and permanent Farm Hands (agric.) and maintains record of wages and hours for workers. May grow hay or cash grain crops to rotate with bulb, flower, or shrub crops. May develop new colors and varieties of flowers by cross-pollination. May be designated according to crop specialty as Bulb Grower; Rose Grower.

O.E.
01.0503 Greenhouse Operation and Management

Organized subject matter and practical experiences which are concerned with principles and practices involved in producing plants under glass and in other artificial environments.

O.E.
01.0504 Landscaping

Organized subject matter and practical experiences which are concerned with the principles and practices involved in locating, planting, and maintaining turf, plants, shrubs, or devices for the beautification of home grounds and other areas of human habitation and recreation.

DOT 407.181-010 Landscape Gardener (agric.)
Landscaper.

Plans and executes small scale landscaping operations and maintains grounds and landscape of private and business residences: Participates with Laborer, Landscape (DOT 407.887) in preparing and grading terrain, applying fertilizers, seeding and sodding lawns and transplanting shrubs and plants, using manual and power-operated equipment. Plans lawns and plants and cultivates them, using gardening implements and power-operated equipment. Plants new and repairs established lawns, using seed mixtures and fertilizers recommended for particular soil type and lawn location. Locates and plants shrubs, trees, and flowers selected by property owner or those recommended for particular landscape effect. Mows and trims lawns, using hand mower or power mower. Trims shrubs and cultivates gardens. Cleans grounds, using rakes, brooms, and

hose. Sprays trees and shrubs, and applies supplemental liquid and dry nutrients to lawn and tree growth. May dig tranches and install drain tiles. May make repairs to concrete and asphalt walks and driveways. May contract with owner at seasonal rate.

DOT 407.884-010 Grounds Keeper (any ind.)

Caretaker, grounds; gardener; yard laborer.

Maintains grounds of industrial, commercial, or public property, performing combination of following tasks: Cuts lawns, using hand mower or power mower. Trims and edges around walks, flower beds, and walls, using clippers and edging tools. Prunes shrubs and trees to shape and improve growth, using shears. Sprays lawn, shrubs, and trees with fertilizer or insecticide. Rakes and burns leaves and cleans or sweeps up litter, using spiked stick or broom. Shovels snow from walks and driveways. Plants grass, flowers, trees, and shrubs. Waters lawn and shrubs during dry periods, using hose or by activating fixed or portable sprinkler system. Repairs fences, gates, walls, and walks, using carpentry and masonry tools. Paints fences and outbuildings. Cleans out drainage ditches and culverts, using shovel and rake. Depending on size and nature of employing establishment, may operate tractor equipped with attachments, such as mowers, lime or fertilizer spreaders, and lawn roller. May be known according to specific task performed as Grass Cutter; Hedge-and-Shrub Cutter, Leaf Raker; Riding-Mower Operator.

DOT 406.168-010 Nurseryman (agric.)

Manager, nursery; nursery farmer; propagation man.

Manages nursery to grow trees, shrubs, and ornamental flowering plants: Determines kinds and amounts of plants to be grown, using knowledge of plant germination, soil content, growing habits of plants, and market conditions. Selects and purchases seed, fertilizer, and gardening equipment. Hires and supervises Nursery Workers (DOT 406.887-030) to plant seeds and cultivate plants. Supervises activities of workers engaged in marketing nursery products. Provides nursery services, such as landscape planting and customer instruction in planting and cultivating ornamental plants. May be designated according to specialization of nursery stock as Azalea Grower; Evergreen Grower; or when performing duties in greenhouse, may be designated as Greenhouse Florist.

DOT 406.884-010 Laborer, Nursery (agric.)

Attends to plants and maintains equipment in nursery: Hauls and spreads topsoil, fertilizer, peat moss, and other materials to condition land. Digs, rakes, and screens soil and fills cold frames and hot beds (heated compartments) to prepare them for planting. Plants, thins, weeds, waters, and sprays nursery and greenhouse stock. Sows grass seed, or cuts, rolls, and lays sod to make lawn. Digs holes and trenches and lays drainage tile. Sets stepping stones and ornamental rock and lays brick paths. Builds wood forms and mixes and pours concrete for pools and steps. Ties, bunches, wraps, or packs flowers, plants, shrubs, or trees for transplanting or to fill orders. Traps, poisons, or shoots pests, such as moles, gophers, mice, and rabbits, to protect plants and seedlings. May be designated according to work performed as Laborer, Greenhouse; Nursery-Order Filler; Rabbit Hunter.

DOT 406.887-022 Groundman (agric.)

Tree-surgeon helper.

Assists Tree Surgeon by handing him tools and equipment, and loading limbs, brush, and trash in truck to be hauled away. May plant trees or dig out brush and stumps. Performs other duties as described under Helper (any ind.)

DOT 406.887-026 Moss Handler (agric.)

Moss worker; peat-moss handler.

Cleans, shovels, packs, and unloads moss in a peat moss processing plant: Separates weeds and dirt from moss by tossing it onto a vibrating screen. Shovels cleaned moss on designated piles. Packs moss into sacks for delivery. Unloads moss from cars or trucks.

DOT 406.887-030 Nursery Worker (agric.)

Plants, cultivates, and harvests trees, shrubs, and ornamental flowering plants in nursery: Mixes soil with other materials, such as sand and peat moss, to prepare plant beds, and plants specified seeds, seedlings, or bulbs. Removes plants from beds and transplants them in pots or fields or packs them for shipment. Transplants sod by cutting it into squares, rolling it into bundles, and laying it out onto freshly cleared ground. Fumigates plants to kill insect pests. Picks out and discards defective plants. Grafts buds onto trees of different varieties as directed. When growing plants in hotbed (glass enclosed artificially heated bed), may be designated as Hotbed Man or when performing duties in greenhouse, may be designated according to specific duties performed as Flower Clipper; Fumigator, Nursery; Plant Grader; Potting Man

DOT 406.887-010 Bagger-and-Burlap Man (agric.)

Baller.

Bags roots of nursery trees and shrubbery: Selects tree or shrub according to variety, size, and grade specified by customer. Digs around plant with spade or mattock to leave ball of earth of required size on roots. Inserts spade under ball, lifts plant from ground, and places it on square of burlap. Wraps burlap around ball to form bag, and secures burlap with pins. Ties twine in hitches around burlap bag to form network of twine to support and strengthen burlap.

DOT 407.137-010 Greenskeeper (any ind.)

Greenskeeper foreman; greenskeeper, head.

Supervises and coordinates activities of workers engaged in preserving grounds and turf of golf course in playing condition: Confers with Superintendent, Greens (DOT 407.138) to plan and review work projects. Determines work priority and assigns workers to specific tasks, such as fertilizing, seeding, mowing, raking, and spraying. Observes employees' work and demonstrates more efficient work methods. Mixes and prepares recommended spray and dust solutions. Directs and assists workers engaged in maintenance and repair of mechanical equipment. Requisitions equipment and materials. May assist workers to perform more critical duties.

DOT 407.138-010 Superintendent, Greens (amuse. & rec.)

Supervises and coordinates activities of workers engaged in constructing new areas and preserving golf course grounds: Plans work programs, utilizing experience and established agronomic

practices to improve and maintain turf and playing condition of course. Plans new areas or changes in course and directs workers engaged in cultivation, grading, seeding, and sodding of area. Reviews test results of soil and turf samples and directs application of fertilizer, lime, insecticide, and fungicide. Tours grounds to ascertain work progress and condition of course. Inspects turf to designate height and frequency of mowing, and determine need for supplemental irrigation to sustain or force growth. Reviews and keeps employee time records. Interviews, hires, and discharges workers. May assign workers to short-course training sessions related to course maintenance.

PART VI

AGRICULTURAL RESOURCES (CONSERVATION, UTLIZATION, AND SERVICES) - OE 01.06 - 1

1. Forests - 01.0601 - 2
2. Recreation - 01.0602 - 6
3. Soil - 01.0603 - 9
4. Wildlife (Including Game Farms & Hunting Areas) - 01.0604 - 10
5. Water - 01.0605 - 12
6. Air - 01.0606 - 13
7. Fish (Including Farms & Hatcheries) - 01.0607 - 13
8. Range - 01.0608 - 16

INSTRUCTIONAL PROGRAM

O.E.
01.06 Agricultural Resources (Conservation, Utilization, and Services)

A combination of subject matter and planned learning experiences concerned with the principles and processes involved in the conservation and/or improvement of natural resources such as air, forests, soil, water, fish, plants, and wildlife, for economic and recreational purposes. Instruction also emphasizes such factors as the establishment, management, and operation of forest lands for recreational purposes.

DICTIONARY OF OCCUPATIONAL TITLES

Occupational Title and Description

DOT 180.168-010 Airplane Pilot--Conservation Officer (gov. ser.)

Conducts conservation activities: Coordinates activities of conservation office pilots in taking game census, in fish planting, range surveys, spraying and seeding. Directs maintenance of conservation office aircraft and maintains record of operation. Frequently pilots plane in conduct of activities. Enforces State and Federal conservation laws and speaks before various public groups.

O.E.
01.0601 Forests

A combination of subject matter and experiences concerned with forests as living communities of plants and animals in which trees are the dominant species. Emphasis is on the multiple use of forest lands and resources.

DOT 441.128-010 Jumpmaster (gov. ser.)

Trains airborne firefighting personnel in parachute jumping and in chute packing, rigging, and repair. Gives directions to Smoke Jumpers during flight to fire area and during jump. May parachute into fire area and participate in controlling fire.

DOT 441.137-010 Suppression--Crew Leader (gov. ser.)

Crew leader; fire protection man.

Supervises and coordinates activities of crew that fells trees, digs trenches, and extinguishes flames and embers to suppress forest fires: Leads crew to area designated on map by Fire Warden (forestry); Forester (profess. and kin.); or other official, and assigns workers to work stations along fireline. Assigns tasks to crew members to

prevent overexertion of any one worker. Observes workers to detect signs of fatigue or illness from smoke inhalation and orders those affected to base camp for treatment. Transmits information and receives instructions from base camp or other units, using portable two-way radio. May fight fires as member of crew. May be designated Fire-Control Aid when employed by Federal agency.

DOT 441.168-010 Fire Lookout (gov. ser.)

Lookout towerman; towerman; watchman, tower.

Observes, locates, and reports forest fires and weather phenomena from remote fire-lookout station: Maintains surveillance from station to observe fires, weather conditions, and unusual events, and to report them to base camp by radio or telephone. Locates fires on area map, using azimuth sighter and known landmarks, estimates size and characteristics of fire, and reports findings. Observes instruments and reports daily meteorological data, such as temperature, relative humidity, wind velocity, and cloud formations. Receives and relays messages from base camp, mobile units, and law enforcement and governmental agencies relating to weather forecasts, fire hazard conditions, emergencies, accidents, and location of crews and personnel. Serves as public contact at station and promotes fire prevention program by explaining State and Federal laws, timber company policies, hazard fire conditions, and fire prevention methods. Maintains records and log books, and makes adjustments to radios and fire-finding equipment. May suppress fires near lookout station.

DOT 441.168-014 Fire Warden (forestry)

Woods fire warden.

Supervises and coordinates activities of workers engaged in forest fire prevention and control: Examines and inventories fire fighting equipment, such as axes, firehose, water buckets, and chemical fire extinguishers, to determine amount and adequacy of equipment. Directs maintenance and repair of equipment, and requisitions additional equipment when necessary. Assigns personnel and equipment to be placed at critical points in case of fire. Inspects forest, logging, and mill areas for fire hazards, and reports hazards to supervisor of area involved. Enforces State and Federal fire regulations. Dispatches personnel and equipment to fires, and supervises firefighting crews directly, or through subordinates. May be required to restrict public recreational use of forest area during fire season.

DOT 441.384-010 Forester Aid (gov. ser.)

Works alone or as member of crew to inventory, protect, and reforest timber lands performing any combination of the following duties: Observes, measures, and records forest data, such as tree species, volume of merchantable timber, topographical features, and tree seedling mortality. Measures and maps such areas as burns, cutover areas, experimental plots, and timber sales sections, using staff compass and chain. Compiles data from recording or measuring instruments, such as rain gage, thermometer, stream flow recorder, and soil moisture gage. Participates in enforcement of recreation rules and regulations relating to parking, campfires, use of

facilities and sanitation, to insure protection of picnic sites, camp grounds, and hunting and fishing areas. Answers questions on regulations, facilities, prevalence and types of wildlife, and tree species. Performs seasonal tasks, such as planting trees [Tree Planter (forestry)], spraying pesticides [Sprayer (forestry)], pruning and thinning trees to improve timber stands [Tree Pruner (forestry)], patrolling area to detect and report fires and hazardous conditions [Fire Patrolman], or leading crew to suppress forest fires [Suppression--Crew Leader].

DOT 441.687-010 Fire Patrolman (gov. ser.)

Patrols assigned area of forest to locate and report fires and hazardous conditions, and to insure compliance with fire regulations by travelers and campers: Travels on foot, horseback, or vehicle to vista points to scan for fires and unusual or dangerous conditions. Reports findings and receives and relays emergency calls, using telephone or two-way radio. Visits camping sites in area to inspect activities of campers and insure compliance with forest use and fire regulations. Extinguishes smaller fires with portable extinguisher, shovel and axe. May serve as crew leader for larger fires. May render assistance or first aid to lost or injured persons. May participate in search for lost travelers or campers. May be stationed at one vantage point except when engaged in fighting fires or investigating unusual conditions elsewhere in forest and be designated Smoke Chaser. ---- (logging) see Watchman (any ind.) I.

DOT 441.887-010 Forest-Fire Fighter (gov. ser.)

Fire crewman; smoke eater.

Suppresses forest fires, working alone or as member of crew: Fells trees, digs trenches, and extinguishes flames and embers to suppress fire, using ax, chainsaw, shovel, and hand or engine-driven pumps. Patrols burned area after fire to watch for hot spots that may restart fire. May cut brush, clear ground litter, and ignite back fire to hasten burnout of major fire within contained area and to prevent its spread across firelines.

O.E.
01.0602 Recreation

The study of recreation as one of the multiple uses of land, including emphasis of the principles of conservation. Included in instruction are examples of recreation activities which can be established, maintained and managed, such as fishing, picnicking, hunting, camping, and native study.

DOT 169.168-070 Park Ranger (gov. ser.)

Enforces laws, regulations, and policies in State or national park: Registers vehicles and visitors, collects fees, and issues parking and use permits. Provides information pertaining to park use, safety requirements, and points of interest. Directs traffic, investigates accidents, and patrols area to prevent fires, vandalism, and theft. Cautions, evicts, or apprehends violators of laws and regulations. Directs or participates in first aid and rescue activities. May supervise workers engaged in construction and maintenance of park facilities and enforce standards of cleanliness and sanitation. May compile specified park-use statistics,

keep records, and prepare reports of area activities. May train and supervise park workers and concession attendants.

DOT 379.168-018 Fish and Game Warden (gov. ser.)

Conservation officer; game and fish protector; game warden; guard, range.

Patrols assigned area to prevent game law violations, investigate reports of damage to crops and property by wildlife, and compile biological data: Travels through area by car, boat, airplane, horse, and on foot to observe persons engaged in taking fish and game, to insure method and equipment used are lawful, and to apprehend violators. Investigates reports of fish and game law violations and issues warnings and citations. Serves warrants, makes arrests, and prepares and presents evidence in court actions. Seizes equipment used in fish and game law violations and arranges for disposition of fish and game illegally taken or possessed. Collects and reports information on condition of fish and wildlife in their habitat, availability of game food and cover, and suspected pollution of waterways. Investigates hunting accidents and files reports of findings. Addresses schools and civic groups to disseminate information and promote public relations. May enlist aid of sportsmen's groups in such programs as lake and stream rehabilitation, and game habitat improvement. May assist in promoting hunter safety training by arranging for materials and instructors. May be designated according to specialty as Fish Protector; Game Protector: or according to assigned patrol as Fish-and-Game Warden, Marine Patrol.

DOT 407 868-010 Park Caretaker (gov. ser.)

Caretaker.

Performs following duties to facillitate maintenance and public enjoyment of city, State, or national parks: Furnishes public with information regarding rules and regulations of parks. Patrols grounds to detect fires and prevent infractions of rules. Directs Park Workers assigned to maintain and clean grounds, buildings, and comfort stations. May direct movement of traffic and parking of automobiles. May register campers and assign camping sites.

DOT 407.887-010 Camp-Ground Caretaker (gov. ser.)

Keeps national forest camping grounds clean, or insures that grounds are kept clean, by disposing of garbage, paper, and other litter, and advising campers concerning regulations pertaining to camping grounds. Lives alone for periods of several months during camping season, discharging own domestic duties, such as cooking and laundering.

DOT 407.887-022 Park Worker (gov. ser.)

Park cleaner.

Keeps grounds of city, State, or national park clean and repairs buildings and equipment: Mows lawns, using hand mower or power-driven lawnmower. Grubs and weeds around bushes, trees, and flower beds and trims hedges. Picks up and burns or casts away paper and rubbish. Repairs and paints benches, tables, guardrails, and assists in repair of roads, walks, buildings, and mechanical equipment, using handtools. Cleans comfort stations and other buildings. May be known according to specific task performed as Trail Builder.

DOT 452.868-010 Hunting and Fishing Guide (amuse. and rec.)

Guide, hunting and fishing; fishing and hunting guide.

Plans itinerary for hunting and fishing trips, guides and transports sportsmen to hunting and fishing areas: Plans route that will afford best camping sites and hunting and fishing areas, utilizing knowledge of countryside. Prepares meals for members of group. Explains hunting and fishing laws and insures that laws are obeyed. Recommends to sportsmen firearms suitable for hunting, and tackle and gear for fishing. Drives motorboat or land vehicle to transport sportsmen to hunting and fishing areas. Paddles or poles water craft to transport sportsmen up and down fishing systems. Rides lead pony and guides members of group on horseback to hunting and fishing areas. Gives first aid to members of group in emergency. May feed, water, and care for animals. May arrange for use of cabins and supplies needed by sportsmen.

O.E.
01.0603 Soil

A combination of subject matter and practical experiences designed to provide opportunities for gaining knowledge and understanding concerning the principles and practices involved in maintaining soil stability and productivity, including the prevention of erosion, pollution, waterlogging, exhaustion of plant nutrients, and the accumulation of toxic salts.

DOT 040.081-074 Soil Conservationist (profess. and kin.)

Plans and develops coordinated practices for soil-erosion control, moisture conservation, and sound land use: Conducts

surveys and investigations on erosion and on preventative measures needed. Plans soil management practices, such as crop rotation, strip cropping, contour plowing, and reforestation as related to soil and water conservation. Prepares soil conservation plan in cooperation with farmers and ranchers to provide for use and treatment of land according to needs and capability. Provides assistance to ranchers and farmers in application of practices, such as terracing and establishing permanent vegetation. Applies principles of two or more specialized fields of agricultural science, such as agronomy, soil science, and forestry, to achieve objectives of conservation.

O.E.
01.0604 Wildlife (Including Game Farms and Hunting Areas)

A study of the principles and practices involved in the preservation and/or improvement of wildlife such as game, fowl, and fish.

DOT 451.181-010 Gamekeeper (hunt. & trap.)

Breeds, raises, and protects game animals and birds on State game farm or private game preserves: Cares for breeding stocks in pens. Selects pairs for mating on basis of size, color, vigor, or desired characteristics. Gathers eggs for artificial incubation, and transfers young to rearing pens. Mixes feed according to formulas and fills feeding stations. Cleans and fills water containers. Sets and maintains traps for predatory and noxious animals and birds that may prey upon or carry disease to charges. Drives birds into portable coops to prepare them for transportation to release area. May liberate birds and animals in designated areas.

DOT 451.781-014 Predatory-Animal Hunter (hunt. & trap.)

Bounty hunter; forestry hunter.

Hunts, traps, and kills predatory animals to collect bounty: Hunts quarry, using dogs, and shoots animal. Traps or poisons animals depending on environs and habits of animals sought. Removes designated parts, such as ears or tail from killed animals, using knife, to present as evidence of kill for bounty. May skin animals and treat pelts for marketing. May train dogs for hunting. May be designated according to animal hunted, as Cougar Hunter; Coyote Hunter; Wolf Hunter.

DOT 451.781-018 Trapper (hunt. & trap.)

Fur trapper.

Traps animals for pelts, live sale, bounty, or to relocate them in other areas: Sets traps with bait, scent, or camouflage, and in patterns according to size, species, habits, and environs of animal sought or according to reason for trapping. Patrols trapline to remove catch and reset or relocate traps. Clubs or drowns trapped fur-bearing animals to prevent damage to pelts. Skins animals, using knife, and stretches pelts on frames to be cured. Scrapes or skives skin-side of pelt with knife to remove fat and flesh, and rubs skin with salt to dry and preserve it. Sorts pelts according to species, color, and quality. Bargains with buyers for price of pelt. Removes parts such as ears or tail, from predatory animals and presents them as evidence of kill for bounty [Predatory-Animal Hunter]. May be designated according to animal trapped as Beaver Trapper; Muskrat Trapper.

Bird Trapper (hunt. & trap.)

Traps birds to serve as brood stock, or for exhibition, extermination, identification, or relocation: Selects and sets traps, nets, or cages according to size, habit, and habitat of bird and reasons for trapping. Walks about area to drive quarry toward traps or net or patrols trap line periodically to inspect setting. Releases quarry from trap or net and transfers it to cage. Kills birds or secures identification tag to bird and releases it. May locate and flush ground birds into nets, using dogs.

O.E.
01.0605 Water

A combination of subject matter and practical experiences concerned with water conservation practices such as prevention of soil erosion, sedimentation, other pollution, seepage, and evaporation, flood control; aquatic weed control; and the development, conservation, and management of water supplies for agricultural, domestic, industrial, and recreational purposes.

DOT 168.287-054 Industrial-Waste Inspector (gov. ser.)

Inspects industrial and commercial waste disposal facilities and investigates source of pollutants in municipal sewage and storm-drainage system to insure conformance with ordinance and permit requirements: Visits establishments to determine if they have industrial waste permits and to enforce provisions of permits. Issues citations to violators of sanitation code. Inspects equipment used in treatment, disposal, and control of industrial wastes, such as floor drains, settling and neutralizing tanks, clarifiers,

and sand traps, to insure conformance with municipal ordinances. Extracts samples of waste from sewers, storm drains, and water courses for laboratory tests. Conducts field tests for acidity, alkalinity, chlorine, and hydrogen sulfide to determine if discharged wastes will cause deterioration of sewerage facilities or pollution of water. Inspects sewers and storm drains to determine presence of explosive gas, using gas-detection equipment. Compiles written reports of investigations and findings and recommends actions needed. May operate chlorinating equipment in treatment of sewage.

O.E.
01.0606 Air

The study of air pollution, including the effects of agricultural activities on pollution, and the effects of pollution on plants and animals.

O.E.
01.0607 Fish (Including Farms and Hatcheries)

A combination of subject matter and activities concerned with the propagation, rearing, stocking and management of fish in public and private waters.

DOT 041.168-010 Fish Culturist (fish.)

Fish-hatchery foreman; hatchery superintendent; pisciculturist.

Supervises and coordinates activities of workers engaged in cultivating fish for use in stocking streams and ponds: Collects, compiles, and interprets data concerning fish habits, growth, migration, food, and enemies and devises methods to control them.

Studies water conditions which fish of various species breed and spawn, and directs fabrication of such conditions in hatchery ponds. Devises techniques for collecting, fertilizing, and incubation of spawn (fish eggs). Oversees treatment of spawn and fry (offspring). Supervises activities of workers engaged in feeding and sorting of fish, and liberation, transfer, or distribution of fish for stocking streams and ponds. May be designated according to type of fish cultivated as Food-Fish Culturist; Game-Fish Culturist.

DOT 436.181-010 Alligator Farmer (fish.)

Captures and raises alligators for breeding purposes. Feeds alligators and allows them to grow to desired size in tanks or pens. Kills animals and sells their hides for making luggage, shoes, and other leather products.

DOT 436.181-014 Fish Farmer (fish.)

Fisheries aid.

Raises food fish, such as trout, to stock lakes, streams, and ponds: Strips eggs from female fish and places eggs in moist pans. Adds milt (reproductive glands and semen of fishes) stripped from male fish, to fertilize eggs. Allows eggs to swell and harden indicating that fertilization has taken place and washes remaining milt from fertilized eggs. Moves fertilized eggs to hatching boxes through which aerated water flows, to allow eggs to develop into fry (young fish). Transfers fry to rearing ponds. Feeds fry high protein foods such as ground beef liver, slaughterhouse offal, or daphnia (water fleas), and permits fry to grow to become size fish

specified for stocking lakes, streams, and ponds. Counts fish. May perform standard tests on water samples to determine oxygen content. May be designated according to kind of fish raised as Trout Farmer.

DOT 436.181-018 Frog Grower (fish.)

Frog farmer.

Captures and raises frogs for consumption or for sale alive: Prepares shallow pond for raising frogs by removing noxious fish, animals, and vegetation from pond. Fences pond with netting and sheet metal to prevent entry of predators and escape of frogs. Plants small fish in pond for frog feed. Captures wild frogs, using dip net, and places them in breeding ponds. Seines tadpoles from breeding pond and places them in brood pond to prevent their being eaten by adult frogs. Kills adult frogs and removes their edible legs. Packs frogs' legs in ice for marketing. Sells live frogs as breeding pairs or scientific specimens, and sells tadpoles as fishing bait.

DOT 436.884-022 Hatchery Man (fish.)

Performs the following tasks in a fish hatchery: Feeds fish by scattering food on surface of water. Regulates temperature of indoor tanks with steam valves. Sorts fish according to size, coloring, and species, transferring them to proper tanks with dip nets. Cleans tanks by draining out water, shoveling out muck and debris, and scrubbing sides of tanks with wire brush.

DOT 436.887-010 Frog-Farm Laborer (fish.)

Cleans frog ponds, using rake and hoe. Fences ponds with netting and sheet metal to prevent entry of predators and escape of frogs. Transfers tadpoles to brood ponds and collects mature frogs, using dip net.

O.E.
01.0608 Range

The study of the theories, principles, and practices involved in the preservation and/or improvement of natural range lands.

PART VII

FORESTRY (PRODUCTION, PROCESSING, MANAGEMENT, MARKETING, AND SERVICES) - OE 01.07 - 1

1. Forests - 01.0701 - 2
2. Forest Production - 01.0702 - 2
3. Logging (Harveting & Transporting) - 01.0703 - 2
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5. Recreation - 01.0705 - 5
6. Special Products - 01.0706 - 6

INSTRUCTIONAL PROGRAM

O.E.
01.07 Forestry (Production, Processing, Management, Marketing, and Services)

A combination of subject matter and experiences concerned with the multiple use of forest lands and resources, including their management and protection.

O.E.
01.0701 Forests

(For definition see 01.0601 Forests under Agricultural Resources.)

O.E.
01.0702 Forest Protection

A combination of subject matter and activities designed to provide knowledge, understanding, and judgment concerning the behavior of enemies of the forest and their control.

O.E.
01.0703 Logging (Harvesting and Transporting)

Study including observation and practical experiences concerned with the initial collective activities involved in harvesting trees as a crop and in terms of not interfering with other desirable uses of the forest.

DOT 162.158-058 Buyer, Log (whole. tr.)

Log buyer.

Purchases trees, such as walnut, redwood, and fir, to cut into logs for resale. Canvasses wooded country to locate trees. May negotiate contract with workers to cut, saw, and transport logs.

DOT 162.158-078 Field Man (forestry)

Arranges with land owners to buy Christmas trees and arranges with contractors to cut trees: Contacts owners of forest lands from list of prospects in assigned district prior to cutting season to negotiate contracts for purchase of trees. Walks over land to determine approximate tree yield and informs property

owner of types and sizes of trees desired. Arranges stumpage (standing timbers) rate, within limits set by home office, to be paid for trees cut. Confers with cutting contractors to arrange for cutting trees on leased lands and establishes piecework rate based on grade and size of trees cut. May supervise operations in district during cutting season [Manager District].

DOT 183.168-030 Logging Contractor (logging)

Jobber.

Arranges contracts with mill, logging company, governmental agency, or individuals, to harvest timber, and coordinates activities of persons engaged in logging operations: Inspects areas to be logged to estimate costs of operation and submits bid for contract. Engages men and equipment, and organizes, schedules, and supervises operations according to production requirements, safety laws, and terms of contract. Consults with company and governmental foresters and inspectors regarding logging method and safety and efficiency of operation. May keep time and production records of crew.

DOT 449.168-010 Chief Cruiser (forestry; logging)

Supervises and coordinates activities of workers engaged in cruising (surveying) land, management planning, determination of quality and quantity of logs in standing timber, and development of logging plans: Determines pattern, intensity and type of cruise, sampling method, and organization of cruise party according to area to be covered. Acts as chief of party, supervises crew, and participates in survey during cruise operations.

Assembles, computes, and summarizes statistical data, and prepares estimates, maps, and reports. May investigate, survey, and report on over utilization of browse by game animals, overgrazing by domestic stock, and need for additional demand food trees. May investigate fire and insect damage and damage to watershed areas by wind and erosion.

DOT 449.287-010 Cruiser (forestry; logging)

Estimator; land inspector; land looker; timber cruiser; timber estimator; timberman; timber rider; valuer.

Cruises (surveys) forest land to obtain estimate of timber, develop topographic maps, and to list area conditions for appraisal, sales administration, logging, land use, and management planning: Travels over area in established pattern, applying predetermined sampling technique. Writes field notes listing timber types and sizes, outstanding topographic features, and existing transportation and communications facilities. Prepares maps and reports indicating type, species, grade, and size of timber, estimated yield, and topography of area cruised. May cut blazes (marks) on trees with ax to mark trail or boundary. May mark trees for cutting [Timber Marker].

DOT 449.287-014 Logging-Operations Inspector (forestry; logging)

Inspector; cruiser.

Inspects logging operations to insure that workers adhere to contract provisions and safety laws and to prevent loss of timber through breakage and damage to residual stand: Examines logging area for utilization practices, slash disposal, sanitation,

observance of boundaries, and safety precautions, and prepares report of logging method, efficiency, and progress. May estimate volume and value of timber in advance of cutting crew [Cruiser] and measure volume of cut logs to determine efficiency of operation [Log Scaler (logging; paper & pulp; sawmill)].

DOT 449.887-010 Seed-Cone Picker (forestry)

Gathers seed cones from evergreen trees, such as fir, hemlock, and balsam, for reforestation purposes: Climbs trees using climber's belt and boots, and selects cones that appear in sound condition and of uniform shape. Places picked cones in bag strapped over shoulder, allowing both hands to be used for picking. May use pole with hook on end to pull cone-bearing branches into reach. May transfer cones to sacks for storage in drying sheds.

O.E.
01.0704 Wood Utilization

Organized subject matter and practical activities concerned with the many wood products of the forest. Emphasis in instruction is on the study of production, selection, grading, and marketing of forest material (wood) for multiple uses in conversion to consumer goods, e.g., paper, plywood, wallboard, plastics, and preservative-treated wood products.

O.E.
01.0705 Recreation

(For definition see 01.0602 Recreation under Agricultural Resources).

O.E.
01.0706 Special Products

Organized subject matter concerned with the production and marketing of special products, e.g., maple syrup, nuts, Christmas trees, and other products. Consideration is given to the great variety of products utilized in their natural states and/or manufactured from such products.

DOT 162.158-086 Field Man, Christmas Trees (whole. tr.)

Negotiates with farmers and woodlot owners to purchase Christmas trees for resale. Explains contract features, such as price and conditions of trees on delivery. Explains or demonstrates to sellers accepted techniques of cutting, baling, and loading of trees.

DOT 442.137-010 Woods Rider (turp. & rosin)

Supervises and coordinates activities of workers engaged in gathering resins from trees for use in making turpentine. Performs duties as described under Foreman (any ind.).

Foreman (any ind.)
Boss; chief; head; leader; manager; overlooker; overseer; principal; section chief; section leader; senior; supervisor.

Supervises and coordinates activities of workers engaged in one or more occupations: Studies production schedules and estimates man-hour requirements for completion of job assignment. Interprets company policies to workers and enforces safety regulations. Interprets specifications, blueprints, and job orders to workers, and assigns duties. Establishes or adjusts work

procedures to meet production schedules, using knowledge of capacities of machines and equipment. Recommends measures to improve production methods, equipment performance, and quality of product, and suggests changes in working conditions and use of equipment to increase efficiency of shop, department, or work crew. Analyzes and resolves work problems, or assists workers in solving work problems. Initiates or suggests plans to motivate workers to achieve work goals. Recommends or initiates personnel actions, such as promotions, transfers, discharges, and disciplinary measures. May train new workers. Maintains time and production records. May estimate, requisition, and inspect materials. May confer with other Foremen to coordinate activities of individual departments. May confer with workers' representatives to resolve grievances. May set up machines and equipment. When supervising workers engaged chiefly in one occupation or craft, is required to be adept in the activities of the workers supervised. When supervising workers engaged in several occupations, is required to possess general knowledge of the activities involved. Classifications are made according to process involved, craft of workers supervised, product manufactured, or according to industry in which work occurs.

DOT 442.138-010 Woods Boss (forestry)

Supervises and coordinates activities of workers engaged in pruning and thinning Christmas trees, and building or repairing roads on company-owned or leased tracts of land between cutting seasons: Tours tracts to determine approximate number and quality

of marketable trees in areas. Inspects work performed and condition and layout of access roads. Lays out and supervises construction of access roads. May supervise operations in district during cutting season [Manager, District]. May negotiate cutting contracts prior to cutting seasons [Field Man].

DOT 442.168-010 Manager, District (forestry)

Coordinates harvesting and shipping of Christmas trees and negotiates with truck owners to transport trees from cutting area to sorting yard: Locates and leases land suitable for gathering and sorting trees in district composed of one or more counties. Negotiates contracts with landowners, prior to cutting season, to buy Christmas trees [Field Man]. Reviews cutting and shipping schedules to determine number of workers needed and to schedule shipments by truck and rail. Interviews and hires workers, such as office clerks, truckdrivers, and yard laborers. Coordinates operations concerned with gathering, sorting, bailing, and shipping trees. Reviews timekeeping records, production reports, and shipping and purchasing invoices submitted by Tallyman (clerical) and Yard Foreman for completeness and accuracy. Supervises clerical activities, such as compilation of production reports, preparation of payrolls, and maintenance of office records. Inspects trees being cut to insure that cutting operations conform to specifications.

PART VIII

AGRICULTURE, OTHER - OE 01.99 - 1

O.E.
01.99 Agriculture, Other

Include here other organized subject matter and experiences emphasized in agriculture which are not listed or classifiable in one of the above categories. (Specify).

DICTIONARY OF OCCUPATIONAL TITLES

Occupational Title and Description

DOT 356.138-014 Animal Keeper, Head (amuse. & rec.)

Keeper, head; superintendent, menagerie.

Supervises and coordinates activities of Animal Keepers engaged in care and exhibition of birds and animals at zoo: Examines animals to determine need for medical care. Supervises Animal Keepers in preparation of food to insure adequate diet for each type of animal. Inspects cages for cleanliness and issues instructions for repair or construction of cages. Specifies type of animal to exhibit and location of exhibition according to weather conditions, behavior characteristics of animal, and its physical condition. May employ, train, and discharge Animal Keepers. May keep time records, and prepare supply requisitions and other clerical reports.

DOT 356.874-010 Animal Caretaker (agric. & medical ser.)

Animal keeper.

Cares for animals, such as mice, dogs, and monkeys, used in medical and biological tests and research: Weighs or measures, grinds, chops, and mixes specified quantities of ingredients to prepare animal food. Feeds and waters animals as indicated by schedules and diet lists, and records amount consumed. Leads or carries animals between quarters, laboratories, and surgery. Shaves operative area of animals to prepare them for surgery, and administers anesthetics. Cleans and sterilizes cages, pens, and surrounding areas, such as walls, windows, and floors, using steam

or germicidal solutions. Places portable cages in autoclave to sterilize them. Repairs cages and equipment, using handtools. Sprays insecticides and spreads powder in animal quarters to exterminate insects. Orders feed and supplies. May remove dead animals to incinerator for cremation.

DOT 356.874-014 Animal Keeper (amuse. & rec.)

Animal caretaker; menagerie caretaker; zoo caretaker.

Feeds, waters, and cleans quarters of animals and birds in zoo, circus or menagerie. Observes and reports sick animals and birds. Treats minor injuries or ailments. Transfers animals or birds from one cage or pen to another. May prepare food. May bathe and groom animals. May answer questions of visitors concerning animals or birds. May be designated according to animal cared for as Bear Keeper; Bird Keeper; Cat Keeper; Deer Keeper; Elephant Keeper; Mammal Keeper; Monkey Keeper; Reptile Keeper.

DOT 356.874-026 Dog-Pound Attendant (agric.)

Pound keeper.

Attends to animals picked up and brought to pound by feeding and watering them and cleaning and disinfecting their pens. Makes routine repairs to pens and other installations.

DOT 356.874-030 General Helper, Laboratory (drug prep. & rel. prod.)

Animal tender.

Cares for laboratory animals, such as rabbits, rats, and guinea pigs, used in drug research: Inspects animals for general appearance and counts animals when received to verify against purchase orders. Mixes food and feeds and waters animals, following

formulas and instructions. Carries animals to and from laboratory. Holds animals during injections. Weighs and records weights of animals. Cleans, dismantles, and sterilizes cages.

DOT 356.874-038 Kennelman (agric.)

Dog care man; dog handler.

Attends to dogs in kennel: Cleans kennels and rebeds dog pens, using brushes and disinfectant solutions. Washes dogs and grooms and trims them for exhibition, using hand brushes, clippers, combs, and scissors. Weighs and mixes specified amounts of feeds, and fills feed and water troughs. Observes dogs to detect sickness and presence of disease. May regulate temperature and ventilation in kennel. May exercise dogs on treadmills. May maintain feed and breeding records. May assist in training dogs for hunting, guiding, and tracking.

DOT 419.884-010 Animal Caretaker (agric.)

Attends to animals, such as mice, guinea pigs, and rats used in experimental and biological research: Feeds and waters animals and cleans their cages. Examines animals to detect signs of illness. Adjusts controls to insure that temperature and humidity of animals' quarters are within specified limits. Separates weaned animals from their mothers. Segregates animals according to breed, color, size, and age. Keeps record of genealogy, weight, and diet of animals for breeding purposes. Places animals in containers for shipment. May inoculate animals with serums or antibiotics.

DOT 429.887-014 Grubber (agric.; const.)

Axman; clearing man; sawman; sawyer.

Clears stumps, trees, brush, cactus, mesquite, or other growth from land so land can be used as pasture, for cultivation, or for proposed construction project: Digs to necessary depth around trees, stumps, brush, or roots to be removed, using grubbing hoe or mattock. Cuts roots with ax or mattock to facilitate removal of trees and stumps. Attaches ropes or stump puller to stumps, trees, or roots, and uses horses or tractor to apply pressure and remove growths. Refills holes with dirt. Cuts sprouts, brush, and other small timber growth with ax, saw, scythe, or other handtool. Piles and burns brush. May be designated according to type of growth removed as Brush Buster (agric.); Cactus Grubber (agric.); Mesquite Grubber (agric.); Sprout Cutter (agric.).